EXECUTIVE SECRETARIAT

ROUTING SLIP

TO:

		ACTION	INFO	DATE	INITIAL
1	DCI				
2	DDCI		X		
3	EXDIR				
4	D/ICS		X		
5	DDI		X		
6	DDA				
7	DDO				
8	DDS&T	DDS&T has S 8/15/84			
9	Chm/NIC				
10	GC	X			
11	IG				
12	Compt				
13	D/Pers				
14	D/OLL				
15	D/PAO				
16	SA/IA				
17	AO/DCI				
18	C/IPD/OIS				
19	C/TTAC		Y		
20					
21					
22					
	SUSPENSE	17 August Date			

Remarks: (Attached forwarded by OMB to DCI, Attn: Mr. Sporkin.) Please coordinate with C/TTAC/OSWR/DDI and clear response with DDCI.

Executive Secretary

9 August 1984
Date

3637 (10-81)

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

August 7, 1984

STAT

Honorable William J. Casey
Director
Central Intelligence Agency
Washington, D.C. 20505

Dear Mr. Casey:

Enclosed is a proposed Executive order entitled "Exercise of Authority Over Commercial Launches."

In accordance with the provisions of Executive Order No. 11030, as amended, it was submitted to this office, along with the enclosed transmittal memorandum, by the Department of Transportation.

On behalf of the Director of the Office of Management and Budget, I would appreciate receiving any comments you may have concerning this proposal. If you have any comments or objections they should be received no later than Tuesday, August 21, 1984.

Comments or inquiries may be submitted by telephone to Mr. John F. Cooney of this office (395-5600).

Sincerely,

Michael J. Horowitz
Counsel to the Director

Enclosure

U.S. Department of Transportation
Office of the Secretary of Transportation

400 Seventh St., S.W.
Washington, D.C. 20590

The Honorable Joseph R. Wright
Deputy Director, Office of Management
and Budget
Washington, D. C. 20503

Dear Joe:

As a follow-up to the July 17 Cabinet Council meeting and our telephone conversation, I am enclosing a copy of an Executive Order designed to transfer ITAR authority over commercial space launches from the Department of State to the Department of Transportation. As you are aware, we recently completed extensive discussions with the Department of State to effect the transfer of this authority and we look forward to expeditious OMB review and coordination of the enclosed document. We believe that the Executive Order will fulfill the President's objectives to redelegate this authority in the near term.

It is my understanding that Senator Trible will be sending draft legislation to the Department early next week for review and comment. Consistent with the President's endorsement of the Commercial Space Initiatives discussed in last week's meeting of the Cabinet Council, DOT supports legislation which would establish a permanent licensing procedure to replace ITAR for commercial space launches. We agree, as previously discussed, that appropriately drafted legislation would greatly simplify regulation of private space launch operations on a permanent basis. We will provide our comments on this bill for your review and coordination promptly.

Both the Department of State and the Department of Transportation believe that handling of these two actions will enable the federal government to carry out its public safety, national security, and international obligations in the most responsive manner.

I appreciate your willingness to expedite review of the Executive Order. It will greatly enhance our ability to obtain legislation supported by the Administration in this session of Congress.

Approved For Release 2008/11/05 : CIA-RDP86M00886R001000070006-1

I look forward to your comments.

Sincerely,

Jennifer L. Dorn, Director
Office of Commercial Space
Transportation

Enclosure

EXECUTIVE ORDER

- - - - - - - - - - - -

EXERCISE OF AUTHORITY OVER COMMERCIAL LAUNCHES

By the authority vested in me as President by the Constitution and laws of the United States of America, including section 621 of the Foreign Assistance Act of 1961, as amended (22 U.S.C. 2381), and section 301 of Title 3 of the United States Code, and in order to delegate certain functions concerning the launch of commercial launch vehicles and their payloads, it is hereby ordered as follows:

Section 1. Executive Order 11958, as amended, is hereby further amended to add the following new subsection to section (1):

---- "(4) to the Secretary of Transportation, to carry out on behalf of the Secretary of State, to the extent such functions apply to the launch into space of any commercial launch vehicle and payload, as defined in Category VIII of the U.S. Munitions List, from the United States, its territories and possessions, and its territorial waters, and from international waters using vessels documented under the laws of the United States. In carrying out such functions, the Secretary of Transportation shall obtain the concurrence of the Secretary of State in accordance with section 2 of the Arms Export Control Act. The Secretary of State will retain responsibility for licensing export of technical data and for functions other than the launch function specifically delegated to the Secretary of Transportation under this order."

EXECUTIVE SECRETARIAT

ROUTING SLIP

TO:

		ACTION	INFO	DATE	INITIAL
1	DCI				
2	DDCI		✓		
3	EXDIR				
4	D/ICS		✓		
5	DDI		✓		
6	DDA				
7	DDO				
8	DDS&T				
9	Chm/NIC				
10	GC				
11	IG				
12	Compt				
13	D/Pers				
14	D/OLL				
15	D/PAO				
16	SA/IA				
17	AO/DCI				
18	C/IPD/OIS				
19	C/TTAC		✓		
20	A/NIO/Econ		✓		
21					
22					
	SUSPENSE		Date		

Remarks

Executive Secretary

7/23/84

Date

3637 (10-81)

THE WHITE HOUSE
WASHINGTON

Executive Registry
84- 4026/3

CABINET AFFAIRS STAFFING MEMORANDUM

Ath ER 84-1744+11-3
ER 84-2212+1

Date: July 20, 1984 **Number:** 186938CA **Due By:**

Subject: DECISION MEMO: Commercial Use of Space

	Action	FYI
ALL CABINET MEMBERS	☐	☑
Vice President	☐	☐
State	☐	☐
Treasury	☐	☐
Defense	☐	☐
Attorney General	☐	☐
Interior	☐	☐
Agriculture	☐	☐
Commerce	☐	☐
Labor	☐	☐
HHS	☐	☐
HUD	☐	☐
Transportation	☐	☐
Energy	☐	☐
Education	☐	☐
Counsellor	☐	☐
OMB	☐	☐
CIA	☐	☐
UN	☐	☐
USTR	☐	☐
GSA	☐	☐
EPA	☐	☐
NASA	☐	☑
OPM	☐	☐
VA	☐	☐
SBA	☐	☐

	Action	FYI
CEA	☐	☐
CEQ	☐	☐
OSTP	☐	☐
NASA	☐	☑
	☐	☐
	☐	☐
Baker	☐	☐
Deaver	☐	☐
Darman *(For WH Staffing)*	☐	☐
Mc Farlane	☐	☐
Svahn	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
Executive Secretary for:		
CCCT	☐	☐
CCEA	☐	☐
CCFA	☐	☐
CCHR	☐	☐
CCLP	☐	☐
CCMA	☐	☐
CCNRE	☐	☐

REMARKS:

Please see attached for the President's decision on the use of commercial space.

Thanks.

[NOTE: This was forwarded to you earlier electronically.]

DCI EXEC REG

RETURN TO:

☐ Craig L. Fuller
Assistant to the President
for Cabinet Affairs

☐ Don Clarey ☐ Tom Gibson ☑ Larry Herbolsheimer
Associate Director
Office of Cabinet Affairs

C.144

THE WHITE HOUSE

WASHINGTON

July 18, 1984

MEMORANDUM FOR THE PRESIDENT

FROM: CRAIG L. FULLER

SUBJECT: Commercial Use of Space

A Cabinet Council on Commerce and Trade Working Group has reviewed an assortment of initiatives designed to encourage commercial activity in space. These suggestions were invited as part of our effort to develop a clear policy for space related commercial activities. The CCCT Working Group, chaired by Bud Evans at NASA, has completed its review and has presented the attached material for consideration.

There were four general categories considered:

I. Economic Initiatives. Tax laws and regulations which discriminate against commercial space ventures need to be changed or eliminated.

II. Legal and Regulatory Initiatives. Laws and regulations predating space operations need to be updated to accommodate space commercialization.

III. Research and Development Initiatives. In partnership with industry and academia, government should expand basic research and development which may have implications for investors aiming to develop commercial space products and services.

IV. Initiatives to Establish and Implement a Commercial Space Policy. Since commercial developments in space often require many years to reach the production phase, entrepreneurs need assurances of consistent government actions and policies over long periods.

RECOMMENDATIONS:

The following proposals are recommended for Presidential approval:

Economic Initiatives:

- Replace the current "carry-on test" for the 25% research tax credit with provisions allowing corporations engaged in a trade or business to form joint ventures and be eligible to use any R&D tax credits resulting from the venture. (I-1)

- Modify the tax code to assure that space capital projects owned principally by United States interests and operated for domestic purposes are eligible for the 10% Investment Tax Credit and the accelerated cost recovery system. (I-2)

- Facilitate long-term contracts with new space ventures if the Government has a need for the product and if the purchase would be cost-efficient. (I-3)

- Direct the Treasury to develop a proposal designed to identify those prototypes eligible for the R&D credit even though eventually used in commercial service, in a manner that would reduce uneconomic incentives that may currently exist. (I-4)

-Clarify the appropriate tariff regulations to ensure space-made products are not considered imports when returned to the United States. (I-5)

These proposed changes are in reference to the current tax law. They would, of course, be revised in accordance with decisions made on fundamental tax reform later this year.

Legal and Regulatory Initiatives:

- Assure that radio frequency assignment for private sector use is timely. Consult with departments and agencies as appropriate.(II-1)

- As a first step, transfer, through Executive Order, the responsibility for controlling space launches from non-government facilities to the Department of Transportation. As a second step propose legislation to confirm this action and streamline the process. Consultation is required as part of both steps with State on foreign policy issues and with the Department of Defense on national security issues. These departments and any other affected agencies would be given an opportunity to concur in the interagency review process. (II-2)

- Provide additional protection of proprietary information through the Space Act. (II-3)

- Assure fair international competition. (II-4)

Research and Development Initiatives:

- Expand current practices to increase private sector awareness of space opportunities and to encourage increased industry investment in high-tech, space-based research and development. (III)

These initiatives would not alter the Administration's basic policy of focusing Federal funding on basic research. It would also not involve any change in the previously approved NASA multiyear funding levels for fiscal years 1984 and 1985. Proposals for additional funding would be presented in the 1986 budget process.

Initiatives to Establish and Implement a Commercial Space Policy:

- Establish and implement a consistent space policy. Immediate steps would include announcing commercialization decisions and increasing public awareness about the commercial opportunities in space. (IV-1)

- Develop a plan for privatization of specific government space activities. (IV-3)

- Establish a high-level national focus for commercial space issues by creating a CCCT Working Group on the Commercial Use of Space. The Working Group would be chaired by a representative of the Department of Commerce with a representative of NASA serving as vice chairman.

  Membership would consist of all interested departments and agencies. All departments and affected agencies will be invited to participate in the initial meeting of the working group and may determine the degree of participation they desire.

  The Assistant to the President for National Security Affairs and the Assistant to the President for Cabinet Affairs will oversee the development of a memorandum of understanding clarifying the coordination process between the SIG(Space) and the CCCT Working Group on the Commercial Use of Space, and the functions and responsibilities of the two bodies.

The proposals listed below were considered and are recommended for further study:

Economic Initiatives:

- Modify research tax credit for space industries where their unique characteristics may warrant distinct provisions. (I-1)

- Explore the tax treatment of free government services for research and development. (I-6)

Initiatives to Establish and Implement Commercial Space Policy:

- Assure reasonably priced access to the Shuttle. (IV-2)

The following proposal was considered and it is recommended that you reject it.

Economic Initiatives:

- Reduce space investment risk through Government loan guarantees, purchase of securities options and by allowing sale of R&D debentures. (I-3)

ACTION:

____ Approve as recommended

____ Not approved

✓ Approved as modified

Attachments

The Deputy Director of Central Intelligence

Washington, D.C. 20505

18 JUL 1984

MEMORANDUM FOR: Craig L. Fuller
Assistant to the President for Cabinet Affairs

SUBJECT : Comments Concerning Your Revised Decision Memorandum on the Commercial Use of Space

1. We are supportive of the effort to encourage the commercial use of space and wish to continue to participate in the continuing efforts in this area.

2. We do, however, have some major concerns with certain items in the Decision Memorandum and with the corresponding items in the initiatives paper. These are:

- Issue III-1: How Can Industry Participation in High-Tech Space Ventures be Increased? - Option 3 includes "expanded dissemination of non-security related technical information to potential commercial users of space." This effort was not requested in the original industry option but was added by the Government working group. We believe that an expanded program to disseminate unclassified data essentially worldwide, in the hope that some industry members might eventually be interested in commercial space activities, would greatly exacerbate the problem of technology transfer to the Soviets. We cannot support this statement and believe it should be deleted or that a more balanced approach should be specified that would selectively support those US industry members that request specific information.

- Issue IV-2: How Can We Assure Industry That a Favorable Commercial Space Policy Will Endure? - Option 1 essentially calls for "reasonable", i.e., less than full cost, pricing of the shuttle. Shuttle pricing policy is already established by the Government and further defined in the soon to be approved NSDD on National Space Strategy. We do not believe that further study is required at this time. We further believe that, if the study is mandated, the NSDD's participants should be included in the study group.

SUBJECT: Comments Concerning Your Revised Decision Memorandum on the Commercial Use of Space

- Issue IV-3: To What Extent Should the Private Sector Develop and Operate Space Facilities? - Option 1 calls for the development of a plan for the privatization of the shuttle. We believe that shuttle privatization could have severe impact on national security programs and would result in Government loss of critical launch capabilities over which it has control. We believe, therefore, that before any implementation plan is contemplated there should be an interagency evaluation of the desirability of privatization. We further believe that such a study group should be composed of all affected parties including the affected national security associated agencies.

- Issues IV-4: How Can We Establish a National Focus for Space Commercialization? - The options call for the setting up of groups which would assume the commercial space function of SIG(SPACE). We believe that the assumption of the commercial space functions of SIG(SPACE) by a new group would fractionate the decision process with regard to national space issues. We recommend against the establishment of such a group although we will support it fully if it is initiated. If established we would urge that its activities and recommendations be coordinated with the SIG(SPACE).

STAT

John N. McMahon

DISTRIBUTION BY ER

Orig - Addressee
1 - DDCI
1 - TTAC
1 - ~~ER File~~
1 - D/ICS (per ES 7/20/84)
1 - COMPT DDS

MEMORANDU FOR: Deputy Director of Central Intelligence

FROM : [redacted] STAT
DCI Alternate Member, CCCT Working Group

SUBJECT : Newly Revised Decision Memorandum on the Commercial Use of Space

1. Attached is the revised decision memorandum from Craig Fuller. It has a suspense date for comments of 1700 on Wednesday the 18th of July. The major point is that it will be forwarded to the President on Thursday the 19th of July. There are only two significant changes in the memorandum. We have no problems with the changes. The substance of the changes are as follows:

- Any interested agency can attend the initial meeting of the Space Commercialization Working Group and determine their own continuing degree of participation.

- The Presidential Assistants for Cabinet affairs and National Security will oversee a memorandum of understanding clarifying coordination between the Commercialization Working Group and SIG(SPACE).

2. Discussions with DoD staffers and others indicate that there is a Presidential press conference or announcement planned for 20 July (this Friday) and that the President is aware that he will be given an item to announce on space commercialization.

3. DoD staffers indicate that Secretary Weinberger will not fight the forwarding of the decision memo to the President. The SECDEF has requested, however, a memo establishing his position for the record.

4. We have prepared the opposite memo for you which provides our recommendation for the DCI position on the subject. It is, not deliberately, in consonance with the DoD memo. DoD has, however, added the technology transfer issue to their memo after discussions with us. The substance of the memo has been informally coordinated with the Intelligence Community Staff and they and I believe it to be important for future reference that the DCI position on these items be made clear at this time. I recommend that you sign the opposite memo.

[redacted] STAT

DCI EXEC

Executive Registry
84-4026/c

THE WHITE HOUSE
WASHINGTON

CABINET AFFAIRS STAFFING MEMORANDUM

: July 17, 1984 Number: 186927CA Due By: 5 p.m., Wednesday July 18

ect: Commercial Use of Space: Revised Decision Memorandum

CABINET MEMBERS	Action	FYI
Vice President	✓	
State	✓	
Treasury	✓	
Defense	✓	
Attorney General		
Interior		
Agriculture		
Commerce		
Labor		
HHS		
HUD		
Transportation		
Energy		
Education		
Counsellor		
OMB		
CIA		✓
UN		
USTR	✓	
GSA		
EPA		
OPM		
VA		
SBA		

	Action	FYI
CEA	✓	
CEQ		
OSTP		
NASA	✓	
Baker		
Deaver		
Darman (For WH Staffing)	✓	
Jenkins		
Mc Farlane		
Svahn		
CCCT/Gunn		
CCEA/Porter		
CCFA/		
CCHR/Simmons		
CCLP/Uhlmann		
CCMA/Bledsoe		
CCNRE/		

EMARKS:

Attached is a revised decision memorandum on the Commercial Use of Space reflecting comments made during the CCCT meeting with the President today.

Please review the document and provide any comments by 5 pm, Wednesday, July 18.

We plan to forward the revised decision memorandum to the President on Thursday, July 19, 1984.

[NOTE: Changes are in brackets.]

Thanks.

TO: DIRECTOR CASEY

STAT

ETURN TO:

✓ Craig L. Fuller
Assistant to the President
for Cabinet Affairs
456-2823

☐ Katherine Anderson
☐ Tom Gibson

☐ Don Clarey
☐ Larry Herbolsheimer
Associate Director
Office of Cabinet Affairs
456-2800

THE WHITE HOUSE

WASHINGTON

Revised: 7/17/84, 1630 EDT

July 17, 1984

MEMORANDUM FOR THE PRESIDENT

FROM: CRAIG L. FULLER

SUBJECT: Commercial Use of Space

A Cabinet Council on Commerce and Trade Working Group has reviewed an assortment of initiatives designed to encourage commercial activity in space. These suggestions were invited as part of our effort to develop a clear policy for space related commercial activities. The CCCT Working Group, chaired by Bud Evans at NASA, has completed its review and has presented the attached material for consideration.

There were four general categories considered:

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IV. Initiatives to Establish and Implement a Commercial Space Policy. Since commercial developments in space often require many years to reach the production phase, entrepreneurs need assurances of consistent government actions and policies over long periods.

RECOMMENDATIONS:

The following proposals are recommended for Presidential approval:

Economic Initiatives:

- Replace the current "carry-on test" for the 25% research tax credit with provisions allowing corporations engaged in a trade or business to form joint ventures and be eligible to use any R&D tax credits resulting from the venture. (I-1)

- Modify the tax code to assure that space capital projects owned principally by United States interests and operated for domestic purposes are eligible for the 10% Investment Tax Credit and the accelerated cost recovery system. (I-2)

- Facilitate long-term contracts with new space ventures if the Government has a need for the product and if the purchase would be cost-efficient. (I-3)

- Direct the Treasury to develop a proposal designed to identify those prototypes eligible for the R&D credit even though eventually used in commercial service, in a manner that would reduce uneconomic incentives that may currently exist. (I-4)

- Clarify the appropriate tariff regulations to ensure space-made products are not considered imports when returned to the United States. (I-5)

These proposed changes are in reference to the current tax law. They would, of course, be revised in accordance with decisions made on fundamental tax reform later this year.

Legal and Regulatory Initiatives:

- Assure that radio frequency assignment for private sector use is timely. Consult with departments and agencies as appropriate. (II-1)

- As a first step, transfer, through Executive Order, the responsibility for controlling space launches from non-government facilities to the Department of Transportation. As a second step propose legislation to confirm this action and streamline the process. Consultation is required as part of both steps with State on foreign policy issues and with the Department of Defense on national security issues. These departments and any other affected agencies would be given an opportunity to concur in the interagency review process. (II-2)

Revised, 7/17/84, 1630 EDT

- Provide additional protection of proprietary information through the Space Act. (II-3)

- Assure fair international competition. (II-4)

Research and Development Initiatives:

- Expand current practices to increase private sector awareness of space opportunities and to encourage increased industry investment in high-tech, space-based research and development. (III)

These initiatives would not alter the Administration's basic policy of focusing Federal funding on basic research. It would also not involve any change in the previously approved NASA multiyear funding levels for fiscal years 1984 and 1985. Proposals for additional funding would be presented in the 1986 budget process.

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  The Assistant to the President for National Security Affairs and the Assistant to the President for Cabinet Affairs will oversee the development of a memorandum of understanding clarifying the coordination process between the SIG(Space) and the CCCT Working Group on the Commercial Use of Space.

The proposals listed below were considered and are recommended for further study:

(Revised 7/17/84, 1630 EDT)

Economic Initiatives:

- Modify research tax credit for space industries where their unique characteristics may warrant distinct provisions. (I-1)

- Assure that free government services for research and development are not taxed. (I-6)

Initiatives to Establish and Implement Commercial Space Policy:

- Assure reasonably priced access to the Shuttle. (IV-2)

The following proposal was considered and it is recommended that you reject it.

Economic Initiatives:

- Reduce space investment risk through Government loan guarantees, purchase of securities options and by allowing sale of R&D debentures. (I-3)

ACTION:

_____ Approve as recommended

_____ Not approved

_____ Approved as modified

Attachments

EXECUTIVE SECRETARIAT
ROUTING SLIP

TO:		ACTION	INFO	DATE	INITIAL
1	DCI				
2	DDCI				
3	EXDIR				
4	D/ICS				
5	DDI				
6	DDA				
7	DDO				
8	DDS&T				
9	Chm/NIC				
10	GC				
11	IG				
12	Compt				
13	D/Pers				
14	D/OLL				
15	D/PAO				
16	SA/IA		✓		
17	AO/DCI				
18	C/IPD/OIS				
19	C/ITTAC	✓			
20					
21					
22					
	SUSPENSE		Date		

Remarks: P/s provide DDCI with comments/recommendations re change ASAP

Executive Secretary
7/17/84
Date

3637 (10-81)

DCI EXEC REG

THE WHITE HOUSE
WASHINGTON

Executive Registry
84-4026

CABINET AFFAIRS STAFFING MEMORANDUM

Date: July 17, 1984 Number: 186923CA Due By: --

Subject: Commercial Use of Space (revised memorandum)

	Action	FYI
ALL CABINET MEMBERS	☐	☐
Vice President	☑	☐
State	☑	☐
Treasury	☑	☐
Defense	☑	☐
Attorney General	☐	☑
Interior	☐	☑
Agriculture	☑	☐
Commerce	☑	☐
Labor	☐	☑
HHS	☐	☑
HUD	☑	☐
Transportation	☐	☑
Energy	☐	☑
Education	☑	☐
Counsellor	☑	☐
OMB	☑	☐
CIA	☐	☑
UN	☐	☑
USTR	☐	☐
GSA	☐	☐
EPA	☐	☐
OPM	☐	☐
VA	☐	☐
SBA	☐	☐

	Action	FYI
CEA	☑	☐
CEQ	☐	☐
OSTP	☑	☐
NASA	☑	☐
	☐	☐
	☐	☐
	☐	☐
Baker	☐	☐
Deaver	☐	☐
Darman *(For WH Staffing)*	☑	☐
Jenkins	☐	☐
Mc Farlane	☐	☐
Svahn	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
	☐	☐
CCCT/Gunn	☐	☐
CCEA/Porter	☐	☐
CCFA/	☐	☐
CCHR/Simmons	☐	☐
CCLP/Uhlmann	☐	☐
CCMA/Bledsoe	☐	☐
CCNRE/	☐	☐

REMARKS:

Attached is the revised decision memo which reflects suggested changes. Also attached are revised issue papers for proposal IV-4. They should replace the last two pages in the previously issued binders.

This matter will be discussed in the CCCT today at 3 p.m. with the President in the Cabinet Room.

Thanks.

RETURN TO:

☑ Craig L. Fuller
Assistant to the President
for Cabinet Affairs
456-2823

☐ Katherine Anderson ☐ Don Clarey
☐ Tom Gibson ☐ Larry Herbolsheimer
Associate Director
Office of Cabinet Affairs
456-2800

THE WHITE HOUSE

WASHINGTON

July 17, 1984

MEMORANDUM FOR THE PRESIDENT

FROM: CRAIG L. FULLER

SUBJECT: Commercial Use of Space

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III. Research and Development Initiatives. In partnership with industry and academia, government should expand basic research and development which may have implications for investors aiming to develop commercial space products and services.

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RECOMMENDATIONS:

The following proposals are recommended for Presidential approval:

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- Facilitate long-term contracts with new space ventures if the Government has a need for the product and if the purchase would be cost-efficient. (I-3)

- Direct the Treasury to develop a proposal designed to identify those prototypes eligible for the R&D credit even though eventually used in commercial service, in a manner that would reduce uneconomic incentives that may currently exist. (I-4)

-Clarify the appropriate tariff regulations to ensure space-made products are not considered imports when returned to the United States. (I-5)

These proposed changes are in reference to the current tax law. They would, of course, be revised in accordance with decisions made on fundamental tax reform later this year.

Legal and Regulatory Initiatives:

- Assure that radio frequency assignment for private sector use is timely. Consult with departments and agencies as appropriate. (II-1)

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- Provide additional protection of proprietary information through the Space Act. (II-3)

- Assure fair international competition. (II-4)

Research and Development Initiatives:

- Expand current practices to increase private sector awareness of space opportunities and to encourage increased industry investment in high-tech, space-based research and development. (III)

These initiatives would not alter the Administration's basic policy of focusing Federal funding on basic research. It would also not involve any change in the previously approved NASA multiyear funding levels for fiscal years 1984 and 1985. Proposals for additional funding would be presented in the 1986 budget process.

Initiatives to Establish and Implement a Commercial Space Policy:

- Establish and implement a consistent space policy. Immediate steps would include announcing commercialization decisions and increasing public awareness about the commercial opportunities in space. (IV-1)

- Develop a plan for privatization of specific government space activities. (IV-3)

- Establish a high-level national focus for commercial space issues by creating a CCCT Working Group on the Commercial Use of Space. The Working Group would be chaired by a representative of the Department of Commerce with a representative of NASA serving as vice chairman. Working with the interested departments and agencies, the Executive Secretary of the SIG(Space) and appropriate White House staff, the Chairman and Vice Chairman will develop a charter for the group to insure appropriate interagency coordination and minimal overlap of activities with regard to space commercialization issues. (IV-4)

The proposals listed below were considered and are recommended for further study:

Economic Initiatives:

- Modify research tax credit for space industries where their unique characteristics may warrant distinct provisions. (I-1)

- Assure that free government services for research and development are not taxed. (I-6)

Initiatives to Establish and Implement Commercial Space Policy:

- Assure reasonably priced access to the Shuttle. (IV-2)

The following proposal was considered and it is recommended that you reject it.

Economic Initiatives:

- Reduce space investment risk through Government loan guarantees, purchase of securities options and by allowing sale of R&D debentures. (I-3)

ACTION:

_____ Approve as recommended

_____ Not approved

_____ Approved as modified

Attachments

Members of the Space Commercialization Interagency Group (SCIG) would come from the major civilian agencies with space responsibilities, including NASA, DOC, DOT/FAA, and others on an as-needed basis (for example: Department of State, Department of the Treasury, and FCC). Cross-representation between SIG and SCIG may be beneficial. If so, NASA would continue to sit on SIG, while DOD and CIA would sit on the SCIG. The SCIG would be chaired by a senior White House counselor with responsibility for domestic economic policy and industrial relations. He would assign a member of his staff who would be available between SCIG meetings for urgent matters to which firms or agencies needed timely response or advice. He would also be able to get the SCIG to focus on national issues of importance to space commercialization. The SCIG would have a two-to-three-year sunset provision.

Option 3: A Commercial Space Working Group.

This option would establish a Commercial Space Working Group reporting to the Cabinet Council on Commerce and Trade. The Commercial Space Working Group would be chaired by a representative of DOC, with a NASA representative the Vice Chairman, and include a representative from DOT, and one representative from the DOD and CIA to assure coordination between national security and civil commercial initiatives. NASA would continue to serve on SIG/Space for the same purposes. DOS, Treasury, and FCC would be represented on an as-needed basis. The Working Group would have a two-to-three-year sunset provision. The Chairman and Vice Chairman of the Commercial Space Working Group will work with the Executive Secretary of the SIG/Space in defining the charter of the new Working Group to ensure that the Working Group's space commercialization responsibilities do not overlap with the responsibilities of the SIG/Space for coordinating the civil and national security sectors.

Option 4: Status Quo.

C. Analysis

Each of the options has advantages. The staff included with the Option 1 Task Force provides the ability to quickly analyze commercial space issues. In Option 2, the placement of the Space Commercialization Interagency Group (SCIG) provides "clout." In Option 3, the Cabinet Council on Commerce and Trade umbrella provides for built-in coordination between NASA and DOC.

Option 2 would have the advantage of developing an efficient means for providing interested agencies an opportunity to participate in space commercialization decisions. It also would not require an outlay of additional funds.

Options 2 and 3 would be easy to implement, while Option 1 would require time and resources to establish. None require legislation. All could be created with some form of sunset provision to assure they do not outlive their usefulness.

Option 3 would have the advantage of utilizing a mechanism already in existence. The Commercial Space Initiatives Working Group that evaluated these papers was established on April 15, 1984, and generally includes those agencies that could make up a Commercial Space Working Group.

On the downside, Option 1 would be the most expensive and also duplicative of existing resources. The SCIG in Option 2 would require one of the highest-level White House counselors to be given this additional responsibility. Option 3 could require additional coordination of some major multi-agency commercial space issues through a Cabinet Council, some of whose members may not be familiar with these issues.

D. Recommendation

Option 3 is recommended by the Working Group members, since the Cabinet Council on Commerce and Trade is probably more oriented toward the major thrust of space commercialization than SCIG would be and since it does not require the creation of a new bureaucracy as suggested in Option 1. Several agencies, such as State and Justice, not included as full-time members in the proposal section would like to have full time membership.

E. Decision

Option 1 _____ A Limited-Duration Space Commercialization Task Force within the Executive Office of the President

Option 2 _____ A Space Commercialization Interagency Group (SCIG), with a two-to-three-year sunset provision

Option 3 _____ A Commercial Space Working Group with a two-to-three-year sunset provision

Option 4 _____ Status Quo.

 e to SA/DCI/IA

THE WHITE HOUSE / Complete package to DSICS
WASHINGTON (via WH Sit Room)

CABINET AFFAIRS STAFFING MEMORANDUM

Executive Registry
84-7443/3

Date: July 13, 1984 Number: 186917CA Due By: 5 pm, Monday, July 16

Subject: Commercial Use of Space Initiatives -- Results of CCCT Working Group

Att. ER84-2202+1

	Action	FYI
ALL CABINET MEMBERS	☐	☐
Vice President	☑	☐
State	☑	☐
Treasury	☑	☐
Defense	☑	☐
Attorney General	☑	☐
Interior	☐	☑
Agriculture	☐	☑
Commerce	☑	☐
Labor	☐	☑
HHS	☐	☑
HUD	☐	☑
Transportation	☑	☐
Energy	☑	☐
Education	☐	☑
Counsellor	☑	☐
OMB	☑	☐
CIA	☑	☐
UN	☐	☑
USTR	☑	☐
GSA	☐	☐
EPA	☐	☐
OPM	☐	☐
VA	☐	☐
SBA	☐	☐

	Action	FYI
CEA	☑	☐
CEQ	☐	☐
OSTP	☐	☐
A/NSA	☑	☐
_____	☐	☐
_____	☐	☐
Baker	☐	☐
Deaver	☐	☐
Darman (For WH Staffing)	☑	☐
Jenkins	☐	☐
Mc Farlane	☐	☐
Svahn	☐	☐
_____	☐	☐
_____	☐	☐
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_____	☐	☐
_____	☐	☐
CCCT/Gunn	☐	☐
CCEA/Porter	☐	☐
CCFA/	☐	☐
CCHR/Simmons	☐	☐
CCLP/Uhlmann	☐	☐
CCMA/Bledsoe	☐	☐
CCNRE/	☐	☐

REMARKS:

Attached is the final set of issue papers concerning commercial use of space. Also attached is a draft memo recommending Presidential action which is believed to reflect the views of the Department and agencies serving on the working group.

A meeting of the CCCT with the President is now scheduled for 3 p.m., Tuesday, July 17, to review this package.

If there are any differing views or other comments please advise my office by 5 pm, Monday, July 16.

Many thanks.

RETURN TO:

☑ Craig L. Fuller
Assistant to the President
for Cabinet Affairs
456-2823

☐ Katherine Anderson ☐ Don Clarey
☐ Tom Gibson ☐ Larry Herbolsheimer
Associate Director
Office of Cabinet Affairs
456-2800

C-144

DRAFT

July 13, 1984

MEMORANDUM FOR THE PRESIDENT

FROM: CRAIG L. FULLER

SUBJECT: Commercial Use of Space

The Cabinet Council on Commerce and Trade has reviewed an assortment of initiatives designed to encourage commercial activity in space. These suggestions were invited as part of our effort to develop a clear policy for space related commercial activities. The CCCT working group, chaired by Bud Evans at NASA, has completed its review and has presented the attached material for consideration.

There were four general categories considered:

I. Economic Initiatives. Tax laws and regulations which discriminate against commercial space ventures need to be changed or eliminated.

II. Legal and Regulatory Initiatives. Laws and regulations predating space operations need to be updated to accommodate space commercialization.

III. Research and Development Initiatives. In partnership with industry and academia, government should expand basic research and development which may have implications for investors aiming to develop commercial space products and services.

IV. Initiatives to Establish and Implement a Commercial Space Policy. Since commercial developments in space often require many years to reach the production phase, entrepreneurs need assurances of consistent government actions and policies over long periods.

DRAFT

RECOMMENDATIONS:

The following proposals are recommended for Presidential approval:

Economic Initiatives:

- Eliminate "carry-on test" for the 25% research tax credit. (I-1)

- Modify the tax code to assure that space capital projects are not excluded from the 10% Investment Tax Credit and the accelerated cost recovery system. (I-2)

- Facilitate long-term contracts with new space ventures if the Government has a need for the product and if the purchase would be cost-efficient. (I-3)

- Modify tax regulations to assure space-made products are not considered imports when returned to the U.S. (I-4)

- Permit expense deductions for prototype spacecraft. (I-5)

Legal and Regulatory Initiatives:

- Assure that radio frequency assignment for private sector use is timely. (II-1)

- Replace the Munitions Control Act and International Traffic in Arms Regulations (ITAR) for private space launches, which are inappropriate to regulate space ventures. (II-2)

- Provide additional protecton of proprietary information through the Space Act. (II-3)

- Assure fair international competition. (II-4)

Research and Development Initiatives:

- NASA should expand and invite greater industry participation in research and development programs which will enhance the commercial use of space. (III-1)

- NASA and DOC should increase efforts to broaden non-aerospace industry awareness of commercial space opportunities. (III-1)

Initiatives to Establish and Implement a Commercial Space Policy:

- Establish and implement a consistent space policy. (IV-1)

- Develop a plan for privatization of specific government space activities. (IV-3)

- Establish a high-level national focus for commercial space issues. (IV-4)

The proposals listed below were considered and are recommended for further study:

Economic Initiatives:

- Modify 25% research tax credit for space industries where their unique characterisitcs may warrant distinct provisions. (I-2)

- Assure that free government services for research and development are not taxed. (I-6)

Initiatives to Establish and Implement Commercial Space Policy:

- Assure reasonably priced access to the Shuttle. (IV-2)

The following proposal was considered and it is recommended that you reject it.

Economic Initiatves:

- Reduce space investment risk through Government loan guarantees, purchase of securities options and by allowing sale of R&D debentures.

ACTION:

_____ Approve as recommened

_____ Not approved

_____ Approved as modified

Attachments

POTENTIAL NATIONAL COMMERCIAL SPACE INITIATIVES

 25X1

[redacted]

11 June 1984

MEMORANDUM FOR THE RECORD

SUBJECT: Fourth Meeting of the Commercial Space Initiatives Working Group--Held on 31 May 1984 (S)

1. The subcommittees have completed an initial reworking/rewording of the industry initiative papers. A complete set was handed out at the meeting. Comments were requested in writing to each subcommittee chairman by COB 4 June, the following Monday. There were only two minor comments which we phoned in on 4 June.

2. A finalized set of papers will be distributed to working group members shortly and agency recommendations will be requested on the various options presented in each initative. If previous NASA statements are correct, individual agency option selections will be noted in some form in the report to the President. Informal selections were requested of working group members by COB Friday the 1st of June. The options selected, shown in the attachment, were phoned in to NASA on 1 June.

3. The subcommittee chairmen will brief their parts of the industry initiatives, including recommended changes, to the Cabinet Council on Commerce and Trade by the end of June--prior to the forwarding of the working group report to the President.

25X1

[redacted]

TTAC/TIG

Attachment
as stated

25X1

[redacted]

SECRET

SUBJECT: Fourth Meeting of the Commercial Space Initiatives Working Group--Held on 31 May 1984 (S)

Informal Selection of Options

Issue		Option Selected
I-1	Establishment of Consistent Space Policy	3-Maintain status quo
I-2	Assure Enduring Commercial Space Policy	2-Long term Funding authorization
I-3	Privatization of Space	3-Maintain status quo
II-	Economic Incentives	-No selection
III-2	Expand Research Data Base	1-Maintain status quo
III-3	Increase Private Sector Awareness	1-Maintain status quo
IV-1	Organize Government to Meet Needs of Commerce in Space	2-NASA for R&D only, regulation to be done by appropriate regulatory agencies
IV-2	National Focus for Space Commercialization	1-Executive Office task force
V-1	Reassignment of Radio Frequencies	2-Maintain status quo
V-2	Munitions and Export Control Mechanisms	2-Transfer control to DOT and support new legislation
V-3	Protect Industry Proprietary Data	2-Exempt proprietary data from FOIA
VI-2	Encourage Fair International Competition	1a-Remove foreign restrictions

SUBJECT: Fourth Meeting of the Commercial Space Initiatives Working Group--Held on 31 May 1984 [redacted] 25X1

Distribution:
Orig - TIG Chrono
1 - EA/DDCI [redacted] 25X1
1 - TTIC [redacted] 25X1
1 - OGI [redacted] 25X1
1 - OGI [redacted] 25X1
1 - NIC
1 - IC Staff [redacted] 25X1
1 - C/OSWR
1 - C/SSD [redacted] 25X1
1 - C/TTAC
1 - DC/TTAC
1 - C/TIG
1 - TTAC Chrono
1 - [redacted] 25X1
1 - Prod. File
OSWR/TTAC/TIG [redacted] (6 Jun 84) 25X1

SECRET

SECRET

25X1

29 May 1984

MEMORANDUM FOR THE RECORD

SUBJECT: Third Meeting of the Commercial Space Initiatives Working Group (Held on 21 May 84) and First Meeting of Its Committee on International and Regulatory Issues (Held on 16 May 1984)

25X1

1. The Committee on International and Regulatory Issues (CIRI), to which CIA is assigned, decided to address its assigned issues by recommending changes and deletions in the industry issue papers and adding a government "recommendations" section. The Commerce rep attended the session (out of interest) and accepted rewrite of Issue V-1 on reassignment of radio frequencies. He agreed to run it through the permanent interagency group concerned with frequency allocation and make sure its SAFSS rep. chops on it. Issue V-2 on munitions and export control mechanisms will be rewritten by the Transportation and State reps. who are also working on (or associated with) changes to those regulations on another interagency working group. The other issues, not of much interest to us, were assigned to various reps.

25X1

2. The Commercial Space Working Group (CSWG) meeting consisted of presentations, primarily status summaries by the Committee Chairmen. The CIRI chairman presented finished rewrites of his issues, except for Issue V-1 on reassignment of radio frequencies. (The Commerce rep missed his CIRI deadline for this issue and the CSWG meeting.) The rewrite of Issue V-2 on munitions and export control mechanisms is attached. It appears adequate to the TTIC staff and I agree with them. NASA now is proposing to the Assistant to the President for Cabinet Affairs that the issue paper on declassification of technical information be completely deleted from the industry report.

25X1

25X1

TTAC/TIG

Attachment:
As stated

25X1

SECRET

C-144

SUBJECT: Third Meeting of the Commercial Space Initiatives Working Group (Held on 21 May 84) and First Meeting of Its Committee on International and Regulatory Issues (Held on 16 May 1984) [redacted] 25X1

Distribution
Orig - TIG Chrono
1 - EA/DDCI [redacted] 25X1
1 - TTIC [redacted] 25X1
1 - OGI [redacted] 25X1
1 - OGI
1 - NIC
1 - IC Staff [redacted] 25X1
1 - C/SSD [redacted] 25X1
1 - C/TTAC [redacted] 25X1
1 - DC/TTAC [redacted] 25X1
1 - C/TIG [redacted] 25X1
1 - TTAC Chrono
1 - [redacted] 25X1
1 - Prod. File
OSWR/TTAC/TIG [redacted] (29 May 84) 25X1

-- Brackets indicates a recommended deletion
-- Underlining indicates a recommended addition

Issue V-2: Should Munitions and Export Control Mechanisms Regulate Commercial Space Activities?

A. Background

Concerns have arisen over the longterm appropriateness of Department of State space payload and launch vehicle regulatory procedures and whether legal authority exists to regulate private launches and private payloads under the Arms Export Control Act.

The Government of the United States, under a number of treaties and international conventions, has the responsibility to authorize and supervise the activities of U.S. endeavors in space. The United States is liable for damage caused in another country by a U.S.-owned launch vehicle or satellite. These agreements prohibit certain weapons in space and also relate to the use of the radio spectrum. These agreements require compliance by Government and commercial activities. As long as all U.S. rocket or satellite launches were conducted by NASA or the Department of Defense, the international agreements posed no significant administrative difficulty. Each launching agency assured compliance with the treaties. A commercial customer for Government launch services had to agree to procedures, as a condition of service, which put this payload in compliance with the international requirements, although customers were not always aware of the reason for some of the procedures.

This process has worked well, but the recent emergence of private launch capabilities may lead to inadvertent circumvention of the Government control procedure. As this private capability started to emerge, the Government agencies recognized that there was no regulatory structure to implement U.S. treaty responsibilities. [Apparently, an] An informal agreement was reached among several involved Government agencies to impose a temporary solution by using the State Department's authority over U.S. activities in the international munitions trade--the International Traffic in Arms Regulation (ITAR). Under the ITAR, listed categories of goods cannot be exported to another nation from the U.S. by any means without a State Department export license. Included on the list are all missiles and satellites. [It was, therefore, easy for the agencies involved to develop a control mechanism by getting the State Department to agree it would not issue an ITAR license until all of the other involved agencies were satisfied that their interests were accommodated.] The ITAR process, therefore, provided the government with a mechanism for ensuring that no matter what the circumstances of the launch, that the legitimate interests of all involved agencies would be addressed.

This approach treats a space object as an export. Only through an [obfuscated] expansive interpretation of the law and regulations can a launch into space be considered an export.

B. Proposals

The Administration should:

Option 1

Direct DOT and State to continue their efforts to transfer the launch approval process under ITAR to DOT.

[Affirm that the munitions and export control mechanisms are inappropriate to regulate space activities and issue an Executive Order designating an agency to draft regulations implementing U.S. space treaty obligations regarding payload and launch regulations.]

Option 2

[Continue the current situation.] Support legislation establishing a more suitable and permanent licensing process to replace ITAR, to be performed by DOT.

Option 3

Support both options.

C. Analysis

While control through the ITAR meets the objectives of complying with treaty obligations, this [method is suspect in at least two respects.] approach is only suitable as a short term measure for two reasons. The first is that using a law and implementing regulations enacted for one purpose to accomplish a different purpose is poor policy. It is the kind of approach that leads to confusing regulation. [overregulation.] Second, it is a mistake to use the apparatus of munitions control to regulate commercial space activities. Payload and launch vehicle regulation is [not primarily a munitions control problem and it is an error to create the impression that it is.] a safety issue, not only a foreign policy and national defense requirement. [Further, by labeling a space launch an export, products manufactured in space may be considered imports when landed in the U.S.] All this makes the cost of compliance with regulations difficult. [uncertain.] Therefore, it should be affirmed that the ITAR is an inappropriate mechanism for regulating space payloads and launches on a permanent basis.

For these reasons, regulations should be drafted and implemented delineating the Government's interests in controlling operations in space and the specific requirements for a launch license. The regulations should identify the agency responsible for the administration of the licensing procedure. The restrictions should be as narrow as possible.

D. Recommendation

The Executive Agencies unanimously recommend option 3.

[D]. E. Decision

Option 1. _____ [2: Continue the current status.] Transfer the current responsibility for controlling space launches as exports to the Department of Transportation where the process can be streamlined and made the least burdensome to the private sector while meeting essential government requirements.

Option 2. _____ [1: Affirm that the munitions and export control mechanisms are inappropriate to regulate space operations.] Support legislation that would simplify regulation of private space launch operations and replace the Arms Control Act and ITAR for that purpose.

Option 3. _____ Implement both options above.

A bribe from NASA for members of the CSWG. ("Hartsfield Coats" is not really the first commercial company using the shuttle but is two separate astronauts--Hartsfield and Coats).

MEMORANDUM FOR THE RECORD

SUBJECT: First Meeting of the Cabinet Council on Commerce and Trade Working Group on Commercial Space Initiatives--Held on 3 May 1984 [redacted] 25X1

Background (as presented at the meeting)--NASA and others arranged a luncheon meeting of President Reagan and industry leaders to discuss "space commercialization" at which the President asked for specific recommendations. An industry panel "Commercial Space Group" (CSG) was thereupon organized and hosted by the office of Cabinet Affairs and NASA. A report containing proposed initiatives was prepared by the industry group and titled "Private Enterprise in Space--An Industry View". A government working group (GWG) has been formed (see attachment A) to review and comment on the industry report. The DCI representative was not initially accepted on the GWG since the DCI is not a member of the Cabinet Council on Commerce and Trade. After discussion of proposals for industry access to classified information it was decided to include a DCI representative [redacted] and a DOD representative in the group. [redacted] 25X1 25X1

GWG Goals--The primary goal is to develop a brief administration evaluation of the industry initiatives to accompany them to the President. Concerns and reservations of agencies will be identified by agency; a consensus will not be attempted. New initiatives can be added. "Privatization of space" and the expendable launch vehicle issue are to be deemphasized. An agenda for further effort by the GWG or the CSG would be welcomed. About a one month GWG effort is planned (see attachment B) with a final report due on 8 June. The White House wants to announce space commercialization initiatives by mid-year. [redacted] 25X1

GWG Procedures--NASA will chair the group and meet privately with individual members between the scheduled meetings. They hope individual initiatives can be divided among separate agencies. It appears that the DCI and DOD representatives will get the "declassification" initiative, which is the one of main concern to us (see attachment C). The CSG's concern is that Japan and other competitors appear to have unclassified but proprietary technology in certain areas equivalent to classified US technology. There are two other initiative also of concern to CIA: reassignment of radio frequencies from Government to commercial users; and change of the laws relating to export control (and technology transfer) of satellite launches. (S)

[redacted] 25X1

Attachments
as stated

SECRE

SUBJECT: First Meeting of the Cabinet Council on Commerce and Trade Working Group on commercial Space Initiatives-- held on 3 May 1984 [redacted] 25X1

Distribution:
Orig - file
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1 - OGI [redacted] 25X1
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1 - NIC [redacted]
1 - IC Staff [redacted] 25X1
1 - C/SSD [redacted] 25X1
1 - C/TTAC [redacted] 25X1
1 - DC/TTAC [redacted] 25X1
1 - C/TIG [redacted] 25X1
1 - TTAC Chrono 25X1
1 - [redacted]
OSWR/TTAC/TIG [redacted] (9 May 84) 25X1

THE WHITE HOUSE

WASHINGTON

WORKING GROUP ON COMMERCIAL SPACE INITIATIVES

Llewellyn Evans
National Aeronautics and Space Administration
Chairman
Working Group on Commercial Space Initiatives
453-1121

Dawson Ahalt
Department of Agriculture
447-4164

Warren Dean
Department of Transportation
426-2972

James Decker
Department of Energy
252-5110

Robert Hagemann
Department of the Treasury
566-5755

Steve Halpert
Council of Economic Advisers
395-~~5036~~ 3310

Everson Hull
Department of Labor
523-6212

Ray Kammer
Department of Commerce
921-2451

Lehman Li
Office of Policy Development
The White House
456-6402

Harry Marshall
Department of State
632-5904

Steve Piper
Office of the U.S. Trade Representative
395-4510

Michael Shepherd
Department of Justice
633-3643

Jeffrey Struthers
Office of Management and Budget
395-3534

Ike Gillam
National Aeronautics and Space Administration
453-1123

John Neilon
National Aeronautics and Space Administration
453-1121

Lawrence Herbolsheimer
Office of Cabinet Affairs
The White House
456-2800

Attachment B

April 23, 1984

OVERALL SCHEDULE

CABINET COUNCIL WORKING GROUP ON SPACE COMMERCIALIZATION

EVENT*	LEAD	SCHEDULE
Representatives named to working group	Agencies	4/27
First Working Group Meeting (including industry)	NASA	5/3
Agency representatives gather initial agency positions	Agencies	5/4-5/11
Second Working Group Meeting	NASA	5/14
Agency representatives revise initial agency positions	Agencies	5/14-5/18
Third Working Group Meeting	NASA	5/22
Additional Working Group Meetings	NASA	TBD
Draft Report	NASA	5/29
Working Group and Industry Meeting	NASA	~~5/30~~ 6/1
Final Report	NASA	6/8

*Individual meetings on an as-needed basis

Additional orientation and background to be furnished to agency representatives by NASA as required between Working Group meetings.

November 30, 1983

Issue VI-1: How can Industry Gain Easier Access to Classified Technical Information?

A. Background

Capabilities, facilities, and operations developed for the Department of Defense could benefit the private sector if they could be declassified and released for commercial applications.

Commercial interests, particularly those having no access to classified information through Government contracts, are usually unaware that these resources may be available and also are unable to initiate any review and possible declassification.

Also, substantial quantities of data which are not classified are unavailable because of lack of systematic means for their dissemination to non-Governmental users.

B. Proposal

To permit U.S. industry to take full advantage of U.S. Government technology, the following options exist:

Option 1

Assign a senior interagency group to study means for U.S. industry to gain maximum access to U.S. technology while maintaining security and technology transfer safeguards.

Option 2

Establish a Space Technology Clearinghouse for interchange between Government agencies and private organizations having legitimate interests in space technology. The Clearinghouse would evaluate the classification and releasability of data to commercial users. The Clearinghouse would be set up by NASA with DOD and DOC membership and participation.

Option 3

Direct DOD and NASA to be more aggressive in assisting industry in obtaining classified information with commercial possibilities.

Option 4

Expand DOC activities to facilitate better access by U.S. industry to Government technology.

C. Analysis

An example of the possibilities of DOD information and facilities benefiting the private sector is contained in communications satellites in which U.S. industry holds a global technological lead. Initially

developed for DOD use, much of this technology has been declassified and has been made available to the private sector.

Option 1 would provide high-level focus for this issue. However, since this would be only one of many problems which the group would be asked to address, and since it is a complex and continuing problem, the group's ability to establish a long-term solution is doubtful.

Option 2 would establish an organization that could assure a suitable focus for this sensitive issue. If structured appropriately, it could provide an avenue for private sector access to information that could be useful in improving our international competitive position. On the negative side, it would require a new Government entity which could conceivably encounter resistance from existing agencies.

Option 3 would ask existing agencies to be more responsive to this problem. Given the DOD tradition of protecting such information, there may be some resistance to this approach.

Option 4 also would use existing resources through an organization familiar with industry concerns though with less expertise concerning the technological aspects. This option might be best used in combination with Option 3.

D. Decision

Option 1: _____ Assign to interagency group

Option 2: _____ Establish a Space Technology Clearinghouse

Option 3: _____ Direct NASA/DOD to provide more aggressive assistance

Option 4: _____ Expand DOC activities

Option 5: _____ Take no action

ROUTING AND TRANSMITTAL SLIP Date 4/23/84

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. ES/TTIC -- [redacted]		
2. Room 903 Key Bldg.	Executive Registry 84-1774/1	
3.		
4.		
5.		

25X1

Action		File		Note and Return	
Approval		For Clearance		Per Conversation	
As Requested		For Correction		Prepare Reply	
Circulate		For Your Information		See Me	
Comment		Investigate		Signature	
Coordination		Justify			

REMARKS

Dave - Per our conversation plo note and pass on to [redacted] I have passed his name to Craig Fullers office as DCI rep to this working group - no meeting on agenda as yet. [redacted] is aboard and offers any ICS support to Fred. Pls have Fred touch base with me when he returns. Thanks.

25X1

25X1

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
JC. Executive Secretary	Phone No.

5041-102 OPTIONAL FORM 41 (Rev. 7-76) Prescribed by GSA FPMR (41 CFR) 101-11.206

☆ GPO : 1981 O - 361-529 (148)

DCI EXEC REG

84-1144

EXECUTIVE SECRETARIAT

ROUTING SLIP

TO:

		ACTION	INFO	DATE	INITIAL
1	DCI				
2	DDCI		✓		
3	EXDIR				
4	D/ICS		✓		
5	DDI				
6	DDA				
7	DDO				
8	DDS&T				
9	Chm/NIC				
10	GC				
11	IG				
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SUSPENSE ____________ Date

ES — we shd name a TTIC person to this working group this grp

Remarks

set up @ DDCI's request —

Executive Secretary

4/20/84

Date

3637 (10-81)

THE WHITE HOUSE
WASHINGTON

April 19, 1984

TO: John McMahon

FROM: *CRAIG L. FULLER*

☒ FYI

☐ Comment

☐ Action

Approved For Release 2008/11/05 : CIA-RDP86M00886R001000070006-1

EXECUTIVE SECRETARIAT

ROUTING SLIP

TO:		ACTION	INFO	DATE	INITIAL
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2	DDCI		✓		
3	EXDIR				
4	D/ICS		✓		
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Remarks

Executive Secretary

4/20/84

Date

3637 (10-81)

THE WHITE HOUSE

WASHINGTON

April 10, 1984

MEMORANDUM FOR THE CABINET COUNCIL ON COMMERCE AND TRADE

FROM: CRAIG L. FULLER CLF

SUBJECT: Commercial Space Initiatives

The President and Congress have expressed strong support of expanding private sector involvement in space. The success of recent shuttle flights has stimulated interest in possibilities of profitable free-enterprise businesses in space. The attached set of issue papers were developed by a diverse group of business leaders who met with the President last summer. The issue papers deal with initiatives that the Nation might take to help stimulate commercial space endeavors. With the Government as a partner, private sector enterprise can help turn space into an arena of immense benefits for our Nation.

In light of the President's desire to encourage such private investment in space, I would appreciate your having your staff review the attached issue papers. Please appoint a representative to serve on a Cabinet Council for Commerce and Trade Working Group that will be responsible for assuring appropriate coverage of critical agency concerns. NASA will chair the working group to discuss agency comments.

Please provide initial comments by c.o.b., April 16th.

cc: Members of SIG/Space

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PRIVATE ENTERPRISE IN SPACE

-- An Industry View

The following analyses of potential commercial initiatives were drawn by a 15-member Commercial Space Group made up of representatives from diverse private sector firms. They examined opportunities in and impediments to the commercial use of space.

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TABLE OF CONTENTS

ISSUE PAPERS

DRAFT

DRAFT

December 13, 1983

PREAMBLE

The success of recent Shuttle flights has aroused interest in the possibilities of profitable, free-enterprise businesses in orbit.

To examine that outlook, several private firms jointly established a Commercial Space Group. It appraised opportunities for and impediments to the commercial use of space.

These pages present the Group's report.

The Group's conclusions are straightforward:

Commercial activities in space by private enterprise need to begin now if our nation is to retain and improve its leadership in science and technology, its high living standards, and its advantages in international trade.

Natural and bureaucratic barriers inhibit the commercialization of space. These handicaps need to be diminished or removed with Government help.

With the Government as a partner, private enterprise can turn space into an arena of immense benefits for our nation.

In order to assure that the potential benefits are realized, the Group developed options for resolving twenty of the most critical issues connected with space commercialization. In several instances, more than one option may need to be implemented to resolve the issue.

DRAFT December 13, 1983

EXECUTIVE SUMMARY OF NATIONAL INITIATIVES RECOMMENDED BY THE COMMERCIAL SPACE GROUP

- National Commercial Space Policy. Because commercial developments in space often require many years to reach the production phase, entrepreneurs need assurances of consistent government actions and policies over long periods, including:

  -- Cost-effective access to and return from space.

  -- A place to work once in space (space station).

- Economic Incentives. Laws and regulations which discriminate against commercial space ventures need to be changed or eliminated. The following actions are needed:

  -- Modify the tax code to assure that space payloads are not excluded from the 10% investment tax credit.

  -- Modify 25% research tax credit legislation to assure that commercial space ventures are not excluded from eligibility.

  -- Modify tax regulations to: (1) assure space-made products are not considered imports when returned to the U. S., and (2) permit expense deductions for prototype spacecraft.

  -- Permit agencies to provide partial market assurance to new space businesses if the Government has a need for the product and if the Government purchase leaves significant private capital at risk.

- Expanded Government Research. In partnership with industry and academia, NASA needs to expand basic and applied research and improve dissemination of research results which may have implications for investors aiming to develop marketable products and services. Recommended actions include:

- -- Provide exploratory commercialization grants, reduced-rate flights, payload integration support, and low-g test facilities.

- -- Expand microgravity research and increase applications-oriented industry representation on advisory committees.

- -- Expand dissemination of experimental data and establish industry/university "low-g centers of excellence."

o Role of Federal Agencies. Responsibilities of U. S. Government Agencies relating to commercial space activities need to be firmly assigned and clearly defined, as follows:

- -- NASA is responsible for research and promotion.

- -- DOT (possibly in combination with DOC) is responsible for regulations.

- -- A White House-level commercialization group should be established.

o Legal and Regulatory Barriers. Laws and regulations predating space operations need to be updated to accommodate space commercialization, including:

- -- Replacing the Munitions Control Act and ITAR, which are inappropriate to regulate space ventures.

- -- Opening Government radio frequencies for private sector use.

- -- Providing additional protection of proprietary information thru the Space Act.

o National Security and International Issues. Gaining access to Government-owned technical information and assuring fair international competition are among concerns of prospective investors in space endeavors. In this regard, it is recommended that:

- -- Classified Government information useful to U. S. industry in its competition in international markets should be more available to industry.

DRAFT

December 13, 1983

INTRODUCTION

Historians may look at the 1980's as the beginning of an industrial revolution in space. They may pinpoint these years as the period in which U.S. business and Government joined in partnership to set up shop in orbit. The industrial move spaceward may presage a new economic and social expansion as well as a reemphasis of the United States' technological leadership.

Private undertakings in space promise the same rewards for our national welfare which free enterprise has historically bestowed on our people -- jobs, higher living standards, new outlets for innovation and imagination, additional stimulation of technical education and new possibilities for investments and profits. It also can be expected to enhance our balance of payments and our national security and prestige.

Nine spectacularly successful flights by NASA's two Shuttles have shown that our nation is on the verge of a space transportation system sufficiently dependable to support space industries. Facilities for permanent manned operations in orbit are becoming feasible. For the first time it could become possible to assure industry of routine access to orbit and a suitable place to work once there.

Though the technology is ripe, manmade barriers block or slow private sector entrance to space. Laws and regulations enacted long before private investments in space were envisioned still govern commercial space operations. Onerous tax and tariff laws and regulations and outdated or inappropriate administrative mechanisms are discouraging even some of the staunchest advocates of investment in commercial space endeavors.

To these artificial handicaps must be added the natural high risks and costs inherent in space operations. Expenditures for building and launching research and manufacturing equipment for use in space can require investments from 10 to more than 100 times as large as for comparable facilities on the Earth. The danger of loss is many times greater in space. The possibilities of quick profit are low.

Yet, the ultimate social, economic and technological benefits for our nation and individual citizens justify the risks. Privately owned and operated, highly profitable communications satellites are already demonstrating that free enterprise in space works well.

Prolonged near-weightlessness and other unique attributes of space may make possible the manufacture of unprecedented products: medical preparations for fighting some of our most widespread diseases; alloys stronger yet lighter than any presently known; electronic components for faster and smarter computers and better electronic machines than are now available, and systems for almost universal information availability to increase the diffusion of knowledge.

Domestic and international markets for space-based products and services are estimated to be immense and they may grow geometrically. Understandably, competitors abroad are experimenting in all of these fields. Foreign subsidies are often large and extend beyond research and development into production and marketing.

The accompanying 20 issue papers, in six categories, discuss each of the major problems connected with the commercialization of space:

- o National Commercial Space Policy. Because commercial developments in space often require many years to reach the production phase, entrepreneurs need assurances of consistent Government actions and policies over long periods.

- o Economic Incentives. Laws and regulations which discriminate against commercial space ventures need to be changed or eliminated.

- o Expanded Government Research. In partnership with industry and academia, NASA needs to expand basic and applied research and improve dissemination of research results which may have implications for investors aiming to develop marketable products and services.

- o Role of Federal Agencies. Responsibilities of U.S. Government Agencies relating to commercial space activities need to be firmly assigned and clearly defined.

- o Legal and Regulatory Barriers. Laws and regulations predating space operations need to be updated to accommodate space commercialization.

- o National Security Issues. Gaining access to Government-owned technical information and assuring fair international competition are among major concerns of prospective investors in space endeavors.

The entrance of free enterprise into space for commercial activities conforms with national traditions. Private initiative has been the foundation of our nation's development and progress from its beginning. Even during the earliest explorations of the North American continent, explorers and pioneers were followed by traders and craftsmen who came to serve new settlements. Now, industrial entrepreneurs are following our astronauts into the new realms.

Commercial expertise will perhaps do for space what the earliest American settlers did for our continent. They turned forbidding regions into prosperous and hospitable inhabited areas.

Commercialization will also perhaps do for space what Charles Lindbergh did for aviation. It will show that space is a vital arena for commercial and industrial activities. Outer space is perhaps the 21st-century equivalent of a new continent waiting to share its wealth. The partnership required for these undertakings by the Government, industry, academia and other sectors in our society can only strengthen our nation. Space commercialization is perhaps as much our nation's manifest destiny as was the taming of lands earlier in our history.

DRAFT

November 30, 1983

Overview I: Establishing and Implementing a Commercial Space Policy

Free enterprise, which has been the wellspring for our Nation's development and prosperity, now faces the challenge of developing outer space for the benefit and advantage of our society and its individual citizens.

If the private sector is to go forward with substantial investments in space endeavors, the business climate for such undertakings needs to be reasonably orderly, stable, dependable, and predictable.

Entrepreneurs considering the commitment of large quantities of resources need to know what role our Government envisions for private enterprise in space, and what policies our Government intends to establish and implement regarding private space enterprises.

Before private investors can be expected to enter into commitments, they will need to have reasonable prospects that Government policies will essentially persist at least through the life of long-duration space development ventures which may stretch across several national administrations.

Three issue papers -- I-1, I-2, and I-3 -- address the above private sector concerns.

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December 1, 1983

Issue I-1: How Can We Establish A Consistent Commercial Space Policy?

A. Background

No clearly stated Space Commercialization Policy presently exists. The willingness of the private sector to invest in space endeavors depends to a large extent on confidence in consistent, dependable and predictable Federal Government actions relating to these investments. A commitment by the Federal Government regarding commercial policies would encourage private sector investments.

B. Proposals

Three courses of action lend themselves to addressing these concerns:

Option 1: National Space Commercialization Policy (NSCP)

A policy clearly defining the Federal Government's objectives and specific commitments would be issued promptly. (Each proposed goal and commitment for the policy is the subject of an attached issue paper. These papers are to provide the ingredients for the NSCP).

Option 2: Pronouncements by Administration and Congressional Leaders

Public pronouncements of high-level support would emphasize expected social, economic and technological benefits to our nation and individual citizens. (This option substitutes public awareness methods for the NSCP of Option 1).

Option 3: National Policy plus Public Awareness Efforts

This option combines options 1 and 2. A NSCP would be accompanied by public pronouncements fostering an image of importance and urgency for Space Commercialization.

C. Analysis

Option 1 sends a clear message to the private sector. A key element would be a prompt, detailed policy statement. Option 2, though encouraging the private sector, would probably be perceived as a lesser national commitment. Option 3 signals a very strong national commitment to commercial space endeavors. Except for some relatively minor costs associated with the public awareness efforts, none of these options will impact the budget. To secure effective results from the policies being expounded will require selection and implementation of the appropriate options listed below.

D. Decision

Option 1 _____ Establish a clear National Space Commercialization Policy (NSCP).

Option 2 _____ Pronouncements by Administration and Congressional Leaders.

Option 3 _____ National Policy plus Public Awareness Efforts.

DRAFT

December 13, 1983

Issue I-2: How Can We Assure Industry That a Favorable Commercial Space Policy Will Endure?

A. Background

Concern over the possibility of a reversal of Government support for space commercialization exerts a detrimental effect on private space investment. This concern is amplified when it is recognized that typical R&D activities usually require years to mature from initial research to a marketable product. To justify investments in space ventures, business must know that its access to space is assured and that once it gets there it has a place to manufacture its product. Measures providing such Government assurance for prospective space businesses will counteract this concern.

B. Proposals

The actions below would help instill investor confidence that positive Government commercial space policies will last.

Option 1: Commitment to a Production and Research Facility in Space

Option 2: Assured and Enhanced Transportation for Commercial Space Ventures

(a) Reasonably Priced and Streamlined Access to Shuttle
(b) Expansion of Shuttle Fleet

Option 3: Long-Term Funding Authorization for Programs Supporting Space Commercialization

C. Analysis

Approval of Space Station development under Option 1 would provide the private sector with an expression of Government intent to support commercial space activities. The certainty of a strong space research and production capability would decrease investment risk and provide incentive for private commitment to long-term participation. The cost would be approximately $200M in FY85 and approximately $8B total through FY91.

Option 2 calls for policies which would assure dependable and timely access to orbit. Option 2(a) would include assured, reasonably-priced space aboard the Shuttle as well as streamlined access to it for commercial payloads. NASA should publish long-term pricing policies and undertake Shuttle modifications allowing commercial payloads to be processed quickly. This will cost between $5 and $10 million in FY85. Continuing improvements will require similar expenditures for several years. Option 2(b) would provide additional assurance of availability of access to space. It would cost approximately $150M in FY 85 and $2B total through FY 91.

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Option 3 would require legislation authorizing multi-year funding for Government endeavors supporting space commercialization. This assurance of Government support would encourage long-term planning by the private sector and help attract investment capital. This option would not have any budget impact.

D. Decision

Option 1 _____ Space Station or Equivalent Production and Research Facility in Space.

Option 2 Assured and Enhanced Transportation for Commercial Space Ventures.

2(a) _____ Reasonably Priced and Streamlined Access to Shuttle.

2(b) _____ Expansion of Shuttle Fleet.

Option 3 _____ Long-Term Funding Authorization for Programs Benefiting Space Commercialization.

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December 5, 1983

Issue I-3: To What Extent Should the Private Sector Develop and Operate Space Facilities?

A. Background

As our space efforts continue to mature, a significant portion of the civil space program will move from research and development to routine operations. This process will continue to absorb a large portion of NASA's budget. If these routine but essential operations, as well as development of new facilities, were instead undertaken by the private sector through commercialization, a significant segment of NASA's budget could then be allocated to advanced R&D.

B. Proposals

Option 1: Develop a Plan for "Privatization" of Existing Space Operations, Including Shuttle Operations

This would require establishment of a plan for the commercialization of existing routine civil space-related functions including Orbiter operation, maintenance, marketing, and on-orbit services. This plan should address the key elements of simultaneously meeting national security, private sector and civil Government requirements, as well as international considerations. A goal of achieving this objective prior to 1990 would be established and mechanisms would be set up to begin transition to the private sector in the mid-1980's.

Option 2: Develop a Plan for Commercial Development of New Space Facilities, Including Portions of the Space Station

This would establish the intent of the Government to offer the opportunity to the private sector to develop space facilities with private capital prior to seeking Government procurement of such facilities with Government funds.

Option 3: Maintain Status Quo with no Specific Commitment to Commercialization of the Civil Space Program

This option does not call for any new action. Commercialization would occur on a case-by case basis.

C. Analysis:

The three options represent varying degrees of emphasis on the promotion of private sector involvement in the civil space program. Option 1 would transfer existing civil space facilities and services of sufficient maturity to the private sector. To the extent that this could be accomplished, it has the potential of freeing operational portions of the NASA space budget for high-tech R&D. A possible disadvantage is that such private operations will result in higher prices and thereby will discourage new high-tech, high-leverage space businesses.

Option 2 would be a major step towards a Government commitment to commercialization of future space facilities and services. To the extent the private sector develops needed space factories and services, NASA assets are freed to undertake higher technology projects.

Option 3 could also result in significant private sector involvement, but at a slower and more evolutionary pace.

In all cases, the private sector would decide on the extent of its participation.

D. Decision:

Option 1: _____ Develop a Plan for "Privatization" of Existing Space Operations, Including Shuttle Operations.

Option 2: _____ Develop a Plan for Enhancing Commercial Development of new Space Facilities, Including Portions of the Space Station.

Option 3: _____ Maintain Status Quo. No Specific Commitment to Commercialization of the Civil Space Program.

DRAFT

December 1, 1983

Overview II: Economic Incentives

Commercial space projects are typically long-range and high-risk. In our free-enterprise system, they involve discretionary expenditures that must compete for capital with alternative investment opportunities.

In the case of space projects, the elapsed time to attain commercial feasibility will probably be greater than with conventional projects. The combination of high risk and longer times to payoff places space programs at an economic disadvantage to alternative investments.

If we are to nurture commercialization of space, we must look at ways to make rates of return for space projects competitive in the eyes of the free-enterprise risk taker.

Several economic incentives can be applied to help stimulate the competitiveness of space endeavors: (1) tax credits and depreciation allowances; (2) Government/industry risk sharing approaches; (3) exempting free services provided by NASA from tax liabilities, and (4) facilitating insurance coverage for spacecraft owners.

DRAFT

December 5, 1983

Issue II-1: What Changes are Needed so R & D Tax Credit Laws Do Not Exclude Commercial Space Ventures?

A. Background

The R&D tax credit allows a 25-percent reduction of the qualified cost of research and development directly from tax liability. However, there are a number of restrictions on the use of the R&D credit by space-based businesses.

1. The firm must be carrying "on a trade or business," which means that a new firm or an existing firm entering a new line of business cannot use the R&D credit. Since space commercialization would be a new line of business for almost any firm, it will be extremely difficult for space ventures to pass the "carry-on" test.

2. The R&D tax credit is 25 percent of the research expenditures above the average amount of the taxpayer's yearly qualified research expenditures in the base period, which is generally the last three taxable years. Many space ventures will involve new firms with no previous research to credit towards the base period. Existing firms will have an unfair tax advantage over new firms even though many innovative products come from new firms.

3. The firm must conduct the research in-house. Firms entering the space business usually have experience with a product or with the development of space hardware, but usually not both. Therefore it will be necessary for them to obtain part of the R&D work through partnerships or subcontracts. The provision against third-party R&D unfairly handicaps firms lacking R&D capabilities in all facets of a space venture.

4. The firm cannot transfer the R&D products for license or royalty payments. This provision discriminates against firms possessing R&D expertise but lacking the ability to bring a new space product to market.

B. Proposals

The following actions would encourage space commercialization ventures:

Option 1:

Eliminate the "carry-on test" in the ERTA Section 221.

Option 2:

Eliminate the three-year base period for research expenditures to qualify for the R&D tax credit.

Option 3:

Remove the limitation on research performed by third parties in Code Section 44F.

Option 4:

Modify Code Section 44F to allow transfer of R&D products for license or royalty payments.

Option 5:

Implement all changes in Options 1 through 4.

C. Analysis

Implementation of all the options would remove discrimination against space ventures in the tax code, would provide more flexibility to entrepreneurs in setting up space ventures, and would increase the profitability of space ventures by reducing the tax liability, thereby stimulating investment in space. The increased use of the R&D credit would reduce Government tax revenues but the loss would be offset by the long-term tax and social benefits of commercializing space.

D. Decision

Option 1 _____ Eliminate the "carry-on test."

Option 2 _____ Eliminate the three-year base period for research expenditures to qualify for the R&D tax credit.

Option 3 _____ Remove the limitation on research performed by a third party in Code Section 44F.

Option 4 _____ Modify Code section 44F to allow transfer of R&D products for license or royalty payments.

Option 5 _____ Implement all of the changes recommended in Options 1 through 4.

DRAFT

December 5, 1983

Issue II-2: What Changes are Needed in Depreciation Allowances and Investment Tax Credits so They Do Not Discriminate Against Commercial Space Ventures?

A. Background

Depreciation allowances, accelerated depreciation schedules, and investment tax credits have been incorporated in U.S. tax laws for many years to encourage investment in capital equipment. Due to the high cost of building spacecraft and getting into space, new space ventures have a critical need for tax incentives. For a number of reasons, however, companies which own or operate spacecraft may not qualify for the Investment Tax Credit (ITC) or the Accelerated Cost Recovery System (ACRS). The regulations disqualifying spacecraft were intended to prevent abuses of the tax laws but have unintentionally created obstacles to the private development of commercial spacecraft. The following is a list of tax policies that apply to spacecraft.

1. Exported property does not qualify for the ITC or the ACRS. This rule was intended to discourage investment in foreign countries. It was not envisioned at the time the law was written that private investments would be made in space. Objects in space are considered exports, with the exception of communications satellites which were specifically exempted by legislation in 1971. The exception for communication satellites should be broadened to include other types of spacecraft.

2. The ITC and ACRS can only be claimed for property having a definite useful life. Spacecraft do not appear on the IRS depreciation list and the IRS may contend that a particular spacecraft can last indefinitely if it is serviced by the Shuttle.

3. Property which is leased to the government may not qualify for the ITC. Some primarily commercial spacecraft may be leased by NASA, DOD or other Government agencies in connection with various data collection and transmission projects. The restriction on Government use may be avoided if the relationship is structured as a "service contract," but pending legislation in the House and Senate may restrict the use of service contracts.

B. Proposals

The following actions would reduce initial costs, improve the return on investment, and shorten the payback period for commercial space ventures.

Option 1:

a) Permit all spacecraft owned predominantly by United States interests to be eligible for the ITC and the ACRS.

b) Establish acceptable predetermined economic lives for spacecraft.

c) Ensure that service contracts by Government and private space ventures will not prevent the private venture from qualifying for the ITC.

Option 2: Implement only actions a and b.

C. Analysis

Implementation of Option 1 would encourage commercial space projects through improvements in investment criteria. The proposal would remove some of the uncertainties in the Internal Revenue Codes as they relate to spacecraft and make financial planning easier for business. A disadvantage is that tax revenues, in the short term, would be lost due to increased tax credits.

Option 2 differs from Option 1 only in that no action will be taken to permit the ITC for spacecraft leased to the government.

D. Decision

Option 1 _____ Support all of the recommended tax policy changes.

Option 2 _____ Implement only actions a and b.

Option 3 _____ None of the above.

DRAFT

December 8, 1983

Issue II-3: What Government Mechanisms Can Help Attract Capital for Space Ventures?

A. Background

Initial financing requirements for space ventures can range up to several hundred million dollars. The risk associated with operating in space is generally high compared to conventional Earth-based businesses. Many of the companies involved in commercializing space are new companies that do not have financial track records or are existing companies entering a new line of business. The markets for many space products are often uncertain and susceptible to competition from Earth-based products.

For these reasons it will be very difficult, at least in the early stages, for a company to obtain adequate financial backing for a space venture. Traditional loans at normal interest rates (10-25 per cent) will not be available. Internal financing is available only to well-established companies with positive cash flows. Venture capital is accessible to most companies but the payback period is typically three to five years - - too short for space ventures that may not pay off for eight to 10 years. Venture capitalists also charge a very high premium either in the form of equity or interest.

B. Proposals

To make investment capital available to space ventures at reasonable rates, the following mechanisms are available. The changes recommended in issue papers II-1 and II-2 will also help in this regard.

Option 1:

Government-guaranteed loans or bonds.

Option 2:

Government purchase of options on the securities issued by commercial space endeavors.

Option 3:

Allow new and established companies to raise venture capital through the sale of R&D debentures or bonds. The purchase price of these debentures would be deductible immediately by the individual investors rather than the R&D firm.

Option 4:

Provide partial market assurances to new space businesses if the Government has a need for the product and if the Government purchase leaves significant private capital at risk.

C. Analysis

The first option -- Government guarantees -- could make low-cost capital available. However, the Government would be assuming most of the risk that is traditionally the responsibility of the private sector. Option 2 was used successfully with the Chrysler Corporation and turned out to be profitable also for the Government. However, Option 2 also requires the Government to take most of the risks and may distort private capital markets.

Option 3 would allow private investors to deduct investment costs from their tax liability. This would increase the return on their investment and thereby encourage more investments. There would be little or no loss in tax revenues to the Government since the tax liability is only transferred, not eliminated.

Option 4 would permit Government purchase of a new space venture's product. These Government purchases would be limited to those products for which the Government has a need. The purchases would be limited to a small percentage of the market required to make the venture a commercial success so that significant private sector capital is at risk. This would assure that a strong private market exists for the product. It also would reduce the Government risks in comparison with the loan guarantee option. The Government purchase would help the new space venture raise capital as it would demonstrate some initial cash flow.

D. Decision

Option 1 _____ Government-guaranteed loans or bonds.

Option 2 _____ A mechanism for Government purchases of options on securities issued by commercial space endeavors.

Option 3 _____ Allow new and established companies to raise venture capital through sale of R&D debentures or bonds.

Option 4 _____ Provide partial market assurances to new space businesses if the Government has a need for the product and if the Government purchase leaves significant private capital at risk.

Option 5 _____ None of the above.

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December 14, 1983

Issue II-4: What Tax Policy Changes are Needed Regarding Prototype Development Costs, Given the Unique Characteristics of Space Ventures?

A. Background

Current tax policies permit deduction from income of expenses for "research and experimentation" in the year the expenses are incurred. The deduction may include the cost of developing prototype spacecraft. However, if the prototype is to be used in commercial service, then the cost is treated as an investment rather than a current expense and must be depreciated. The space industry, due to the high cost of building spacecraft, frequently uses prototypes in commercial service if the prototype is successful. Other industries, in which the cost of building production hardware is relatively low, usually do not use prototypes in commercial service and are able to deduct the cost of building prototypes as a current expense. The space industry, which is already handicapped by the high cost of hardware, has the additional burden of not being able to deduct the cost of many prototypes as a current expense.

B. Proposals

Option 1:

A statutory revision to expand the definition of "research and experimentation" in Code Section 174 for space ventures so that all costs of developing prototype spacecraft, even if they are eventually placed in service, may be deducted in the year these costs are incurred.

Option 2:

A ruling to expand the definition of "research and experimentation" for space ventures so that all costs of developing prototype spacecraft, even if they are eventually placed in service, may be deducted in the year these costs are incurred.

C. Analysis

In general, firms prefer to deduct expenses in the current year rather than capitalizing and depreciating expenses under the ACRS.

A published ruling would normally be easier to implement than a legislative revision, but in this case amendments recently proposed for Code Section 174 may restrict rather than broaden the types of deductible prototype costs.

The impact on tax revenues would be small, since firms cannot claim the ITC or ACRS deductions if they elect to deduct R&D expenses.

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D. Decision

Option 1: _____ A statutory revision to expand the definition of "research and experimentation" in Code Section 174.

Option 2: _____ A ruling or amendment to the appropriate regulations to expand the definition of "research and experimentation."

Option 3: _____ None of the above.

DRAFT

December 8, 1983

Issue II-5: What Tax Changes are Needed Regarding Services Provided Free by NASA to Industry?

A. Background

The business of commercializing space is characterized by very high entry costs, high operating costs, long pay-back periods, and high risk. To encourage investments, NASA is offering certain services free or at reduced rates to firms seeking to commercialize space.

If Section 118 of the Internal Revenue Code is strictly applied, the market value of services provided by NASA at no cost may be considered taxable income if the recipient is a partnership or other unincorporated entity or if there is a quid pro quo to be provided to NASA. Many of the firms that will enter into commercialization agreements with NASA to receive free or low-cost services will be R&D Limited Partnerships and there is a quid pro quo involved. Under the present interpretation of Section 118, taxes will be due on the market value of the service received from NASA. Since NASA services, especially launch services, have a very high market value, the taxes would be substantial and would tend to defeat the purpose of providing free services as an incentive to commercialization.

B. Proposals

Option 1: Modify Code Section 118 to provide a blanket income exclusion for services provided free by NASA, at least for the testing and initial launch of spacecraft.

Option 2: Provide administrative clarification that services provided by NASA free to qualified ventures are not considered taxable income.

C. Analysis

Legislative action should assure that free NASA services are not considered taxable income. An administrative ruling would accomplish the objective but industry fears that the IRS could easily change an administrative ruling. Because of the long planning horizon required for space ventures, the possibility of changes in the ruling -- for example, after a change in Administrations -- is relatively high. Uncertainties could prevent a new venture from receiving investment capital.

D. Decision

Option 1: _____ Modify Code Section 118 to assure a blanket income exclusion for services provided free by NASA.

Option 2: _____ Provide administrative clarification that services provided free by NASA are not considered taxable income.

Option 3: _____ None of the above.

DRAFT

December 8, 1983

Issue II-6: How Can Import/Export Laws Encourage Space Commercialization?

A. Background

Under current regulations, products manufactured in space and returned for sale on Earth may be subject to import tariffs. This was not the intent of import tariff laws. Yet, this would add to the cost of doing business in space. The application of import tariffs, or even the possibility that import tariffs will be applied, impedes the development of space-based industries and prevents firms from taking advantage of the space environment.

The tax code is also unclear on whether spacecraft income (or losses) will be treated as U.S. or foreign source income. Tax treatment is different if income is from a foreign source. The rules were not written with space ventures in mind.

Many products that can be manufactured in space can be expected to have substantial markets throughout the world. It will be difficult to tap the world market if prices are too high. Many firms involved in space commercialization will be new companies with no established contacts in world markets. To expand the market for space products and services and to maintain U.S. leadership as a provider of high technology, the space industry needs access to import/export financing and other U.S. foreign trade supports.

In summary, import/export laws should not apply to goods transferred between the U.S. and space. However, products that are returned to the U.S. and then sold to a foreign country should be considered exports eligible for trade incentives.

B. Proposals

Option 1: Clarify appropriate tariff regulations to ensure that space-manufactured products will not be treated as imports when returned from space and ensure that export financing and other trade incentives that support U.S. foreign trade are available to space ventures.

Option 2: Implement Option 1 and provide administrative or legislative clarification of the rules for determining the tax status of income from spacecraft.

C. Analysis

The first option would eliminate uncertainties over the tariff treatment of products manufactured in space and would provide incentives for space ventures to enter the international market. Option 2 is unnecessary if the Investment Tax Credit is extended to spacecraft (Issue II-2) since Code Section 861(e) will then permit the income from spacecraft to be treated as U.S. source income.

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j. Decision

Option 1: _____ Clarify the appropriate tariff regulations to ensure that space-manufactured products will not be treated as imports when returned from space and that export trade incentives are available to space ventures.

Option 2: _____ Implement Option 1 and clarify the rules for determining the tax status of income from spacecraft.

Option 3: _____ None of the above.

DRAFT

November 30, 1983

Issue II-7: How Can Adequate, Cost-Effective Insurance for Commercial Space Ventures Be Assured?

A. Background

A major area of concern in commercialization is the possibility that insurance requirements may exceed the capacity of the insurance industry to cover liabilities. One problem is the possibility of an unforeseen accumulation of exposures in the event of manifest changes on the Shuttle. Most insurers will only commit a portion of their capacity to any one payload, thereby reducing the risk on a given mission. A capacity problem could also develop on a dedicated Shuttle mission on which the single payload requires insurance in excess of market capacity.

Spacecraft owners are also concerned over the postponement and occupancy fees for Shuttle payloads. These fees can be substantial, even if the delay is not caused by the spacecraft owner. Insurance to protect against these fees at reasonable rates has not been available.

B. Proposals

Option 1: Direct NASA to:

(1) Provide technical information to insurers to enable them to better evaluate the risks of space operations.

(2) Brief insurers to update them on space developments.

(3) Include insurance availability as a factor in developing the Shuttle manifest.

(4) Reduce postponement fees for causes beyond the control of the spacecraft owner or when insurance is not available at a reasonable cost.

Option 2: Maintain the status quo.

C. Analysis

Option 1 may help reduce the problem of insurance availability without a significant impact on the NASA budget.

D. Decision

Option 1: _____ Direct NASA to undertake the recommended activities.

Option 2: _____ Maintain the status quo.

Overview III: Expanding the Commercial Space Market

The first plunge into space -- that leap from a promising idea to the planning of an in-space experiment -- may require special encouragement.

A number of means of expanding the commercial space market are discussed in the following three issue papers:

The first paper, III-1, proposes ways to ease up-front costs for innovative entrepreneurs seeking to move an attractive idea to the planning stage.

The second paper, III-2, attempts to help prospective space entrepreneurs by making more research information available to them about industrial processes in near-weightlessness.

The third paper, III-3, seeks to create greater awareness in the non-aerospace community about the commercial possibilities space offers so that entrepreneurs will be more likely to give consideration to space ventures in their planning.

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December 7, 1983

Issue III-1: How Can Barriers to Industry Participation in High-Tech, Space-based Ventures be Lowered?

A. Background

There is need for NASA to stimulate the high-technology entrepreneur in the early definition of a commercial enterprise, by supporting the private sector's (1) front-end development of the new space technology, (2) initial development of a business plan for the space-based venture, and (3) exclusivity in joint endeavors for those willing to take the risks of being first-to-market.

At present, the current venture capital market is too small to support significant space-related investment. Financing arrangements are normally under $5 million with an upper limit rarely above the $75-million range. Developing space-qualified R&D or production facilities can cost 10 to 100 times as much as Earth-based facilities. Such large capital outlays will inhibit development or result in selection of only projects with low downside risk. To reduce investment size, it is recommended that NASA help in reducing high, space-related front-end costs. Additionally, the Government (primarily NASA) should invest in new commercial space technologies by supporting the development of needed space facilities. Examples of this type of supporting investment are: (1) terrestrial and spaceborne materials testing facilities; (2) low-cost, accessible, predictable transportation and space platform/stations and (3) low-cost, easily available information on non-security-related technology developments.

B. Proposal

There are three options for supporting new entrepreneurial space ventures.

Option 1

The Status Quo. This option is to maintain current funding of NASA's support activities and provide support to the new entrepreneurial venture in the same way it is done now with joint endeavors and technical exchange agreements. Typically, these agreements take a long time to develop and are costly for the private sector. The current practice is that NASA usually identifies and conducts the space R&D, and industry uses the results where possible.

Option 2

Moderately expand the current practice to include the following: (1) exploratory commercialization grants to help entrepreneurial technologists get their venture and concept work started. (This should not be confused with current research contracts which are valuable in their own right to develop a basic science research data base). These grants should be directed toward application-oriented projects with a reasonable promise of resulting in viable commercial products. In this option, industry (not NASA) identifies the R&D areas of interest and conducts the research; (2) offer reduced-rate

Shuttle flights for development of promising new commercial concepts during the start-up and pilot production phase of commercial space product development; (3) reduce Shuttle integration costs borne by the entrepreneur; (4) provide terrestrial and spaceborne materials-testing facilities, and (5) extend the period of exclusivity as a means of protecting those who are first-to-market.

Option 3

Same as Option 2, except: (1) aggressively expand funding for exploratory commercial grants, reduced flight costs, and reduced integration costs, and (2) provide much broader exclusivity to first-to-market commercial space ventures.

C. Analysis

Option 1 is to maintain NASA's current funding level and proceed with its current Shuttle program leaving considerable front-end costs and risk to be borne by the private sector. This is essentially a no-growth option that provides only modest stimulation of new commercial space ventures.

Option 2 is a modest growth option which will stimulate space commercialization. It will supply seed funding of space R&D in the private sector and will reduce front-end cost for entrepreneurial space ventures. The Government cost is estimated to be approximately $25M in FY 1985:

- Exploratory commercialization grants would be used to help overcome the resistance which frequently exists to undertaking something new and different. They would encourage private industry to consider a new line of business instead of dismissing it out of hand because the opportunity is not "thought through."

- Extending the current practice of offering reduced-cost Shuttle flights through the pilot production phase of a venture will lower the up-front costs for high-tech commercialization efforts.

- Reducing space qualification and Shuttle integration costs through rapid manifesting procedures; providing abundant utility services such as power, cooling and communications; providing standard computer, electronic and structural support systems, and effective timelining and efficient crew utilization will also lower the front-end investment.

- Developing terrestrial and spaceborne materials testing facilities and make them available to industries.

- Exclusivity will give firms willing to take the risks of being first-to-market some protection. It has precedence within NASA. Current Technical Exchange Agreements (TEA's) permit exclusivity for one year following ground test results and require publishing following that period. For a Joint Endeavor Agreement (JEA) exclusivity of the

process remains the prerogative of the developer for the life of the JEA (which is less than 5 years). The intent of Option 2 is to extend this exclusivity period to include the pilot production phase (which would generally result in a total exclusivity period of 5-10 years). However, the exclusivity would be limited to a specific technical approach of a venture so as not to restrict others from pursuing similar ventures that could be competitive. This has no direct budgetary impact.

Option 3 would double the budget impact to $50M in FY 1985. It would reduce front-end costs for entrepreneurs more than either of the first two options. It also would provide greater protection against competition through broader exclusivity. On the downside, it might provide more funding than could be efficiently spent so quickly and it might provide so much protection of first-to-market firms that monopolies could result.

D. Decision

Option 1 _____ Status Quo.

Option 2 _____ Moderately expand current practices to reduce barriers to commercial space ventures.

Option 3 _____ Same as Option 2 except (1) funding accelerated much more aggressively, and (2) exclusivity broadened significantly.

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December 8, 1983

Issue III-2: How can the Research Data Base for Commercial Space Ventures be Expanded?

A. Background

Commercialization of America's space program will result in an increasing need for research data which can be used by industry to develop space-related products and services. Two kinds of experimental data are required; (1) basic research data and (2) applications data which will support specific high-value commercial ventures.

NASA is developing a fundamental understanding of how materials act in near-weightlessness. This modest materials processing analytical and experimental program is useful and should be strengthened. Additional generic research useful to many members of American industry is needed. The current space manufacturing basic research work is conducted with a FY 1984 budget of $26M. A small increase has been proposed for FY85.

B. Proposals

Three options for acquiring research data of interest to American industries for development of space-related products and services are:

Option 1:

The Status Quo. This option is to maintain the level of NASA's space R&D funding at its current level.

Option 2:

This option is to (1) moderately expand funding for NASA's microgravity research budget and (2) direct NASA to strengthen applications-oriented industry representation on current advisory committees; and appoint a high-level industry/university Space Commercialization Advisory Board to advise NASA on the most critical industrial basic research needs.

Option 3:

Same as Option 2, except funding accelerated much more aggressively.

C. Analysis

Option 1 is the least costly. It would maintain NASA microgravity research funding ($26M in FY 84 and a proposed small increase in FY 85).

Option 2 will meet the need of and complement a growing space commercialization program. A $10-15M increase in the FY 85 budget for developing generic experimental data is recommended. Such an increase would have "leverage:" Its impact on the relatively small present effort would represent a significant "shot-in-the-arm" for space commercialization. Appointing an industry/university Space Commercialization

Advisory Board has almost no budgetary impact. Such a Board's deliberations could lead to recommendations for reorienting space R&D to areas of particular interest to American industry. The downside of this action, that it is "still another Government/industry committee," should be outweighed by the vital input to NASA, i.e., answering the question, what do commercial ventures need in the way of space R&D? Membership on the Space Commercialization Advisory Board should be for a limited duration, perhaps two or three years, to keep the Board representative of a wide spectrum of industry views.

Option 3 would involve a doubling of the microgravity research budget to $55M. This would be advantageous in the longer term; there is some question whether this sudden funding increase could be absorbed efficiently.

In summary: Option 1 is a no-growth option. Option 3 is an expensive high-growth option that would symbolize a strong national initiative to commercialize space. Option 2 is a modest, effective program at a reasonable cost.

D. Decision

Option 1 _____ Status Quo.

Option 2 _____ Moderately expand NASA's microgravity research efforts; direct NASA to strengthen industry representation on current advisory committees, and appoint a high-level industry/university Space Commercialization Advisory Board.

Option 3 _____ Same as Option 2, except funding accelerated more aggressively.

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December 6, 1983

Issue III-3 How can Private Sector Awareness of Commercial Space Opportunities be Heightened?

A. Background

Entrepreneurial activity will be stimulated if awareness of commercial space opportunities can be broadened beyond the aerospace community. Current procedures for disseminating information about commercial space opportunities are limited. The information is available mostly through science and technical journals which reach audiences who may already be interested in the uses of space, or through the mass media where discussion is often superficial.

To expand commercial space activities, the commercial technical community must be made aware of space research results so that it will be able to blend its technologies with space technology. Procedures for gaining access to government experts and facilities must become common knowledge to that community.

B. Proposals

There are several options for enhancing the private sector's awareness of space commercialization opportunities.

Option 1

The Status Quo. Maintain the funding level of NASA's private sector awareness programs.

Option 2

A modest increase in efforts to heighten private sector awareness of space commercialization opportunities through: (1) increased publication of experimental data in industry journals and technical reports; (2) expansion of existing and establishment of new commercialization mechanisms (e.g., academic grants, small business innovative research programs, and announcements of opportunity for commercial space endeavors); (3) use of Department of Commerce regional and district offices and advisory committee structures; and (4) establishment of industry/university "low-g centers of excellence."

Option 3

Same as Option 2, except that it would include a significant increase in the activities delineated in Option 2. It therefore would require significantly more funding.

C. Analysis

Option 1 is a no-growth program providing limited support to space commercialization, with no increase in funds.

Option 2 would expand NASA's outreach efforts. It would permit enhanced efforts to reach industries whose products are likely to benefit from space-based commercial endeavors. It also would provide the opportunity to establish institutional mechanisms for better linkages between NASA's and academia's basic research and industry's applications research. This could speed "to-market" efforts to better meet foreign competition. Also, it would permit a modest program of seminars and study support for exposing future technical leaders to commercial opportunities opened by our improved access to space. Option 2 would require approximately $15M in FY 1985 funding.

Option 3 would provide for aggressive implementation of Option 2. It would require approximately $50M in FY 1985. This could result in stimulating significantly more commercial space ventures more quickly. However, it might require spending more funds than could be accomplished efficiently.

In summary, Option 1 would not support a national initiative to commercialize space. Option 2 is a conservative, effective program at a modest cost. Option 3 would show a bold new national initiative, but is expensive.

D. Decision

ion 1: _____ Status Quo.

Option 2: _____ Modest increase in NASA's outreach.

Option 3: _____ Same as Option 2, except that funding is significantly increased.

Overview IV: Appropriate Roles of Agencies

Though NASA has responsibility for all civilian space research and development work, presently no agency has clear jurisdiction to regulate commercial space activities. As these activities multiply, the need becomes increasingly urgent to clearly define the roles of and specifically assign responsibilities to Government agencies regarding the regulation of commercial space activities.

Whatever regulatory assignments are made, there also exists a growing need for a focal point to give space commercialization high-level visibility within the Government.

These related issues are addressed by papers IV-1 and IV-2.

DRAFT

December 8, 1983

Issue IV-1: How Can the Government Be Organized to Respond Better to Commercial Space Needs?

A. Background

The Federal Government's responsibilities for commercial space activities can be divided into three major areas: (1) traditional regulatory functions, (2) international and economic regulatory functions, and (3) non-regulatory functions. At present, no agency has clear responsibility for the regulatory functions affecting commercial space ventures. NASA has responsibility for almost all civil space R&D and promotion functions. In determining the appropriate Government structure for facilitating commercial space endeavors, several considerations appear critical. First, rather than create new bureaucracies, existing agencies with existing expertise should be assigned these responsibilities. Second, to avoid conflicts of interest, regulatory functions and promotional responsibilities should be assigned to different agencies. The commercial aviation industry can attribute much of its success to the fact that it was supported by an R&D and promoter agency (NASA and predecessor NACA) and a separate regulatory agency (FAA and its predecessor in DOC).

B. Proposals

The responsibilities of Government agencies for commercial space activities should be clearly defined.

Option 1

Reaffirm NASA's continuing role as lead agency for space R&D and promotion, and assign DOT to be the lead agency for commercial space regulatory functions. (Given the recent decision assigning the Expendable Launch Vehicle regulatory lead to DOT, this option suggests that it be given the lead for all commercial space regulation).

Option 2

Reaffirm NASA's continuing role as lead agency for space R&D and promotion, and divide regulatory functions between DOC and DOT. DOC would be responsible for international and economic regulatory functions and DOT for traditional (launch safety) regulatory functions.

Option 3

Assign both regulatory and non-regulatory functions to only one agency (NASA, DOC, or DOT, or an entirely new agency).

C. Analysis

Option 1 has the advantage of using existing agencies to perform regulatory and non-regulatory functions for commercial space endeavors. It avoids the conflict-of-interest problem that accompanies combining regulatory and promotional functions in one agency. Also, it provides relatively simple interfaces for industry since only one regulatory agency is involved. On the downside, it assigns DOT some regulatory functions in which it has little expertise. This could require either new staffing or "bureaucratic layering," with DOT trying to manage other departments' regulatory efforts.

Option 2 overcomes much of this problem by giving the lead for traditional regulatory responsibilities to DOT, and the lead for economic and international regulatory matters to DOC. A disadvantage is that this requires a commercial space firm to interface with more than one regulatory agency.

Option 3 would provide "one-stop shopping" for commercial firms in that one agency would handle all space responsibilities. It has several major drawbacks, however. Regardless of which agency is chosen as lead agency, that agency would either have to try to manage other agencies or would have to hire additional staff to gain the necessary expertise to perform all the responsibilities. The agency would very likely often be in a conflict-of-interest situation, trying to promote new commercial space ventures, while also trying to assure adequate regulation of them. If a new agency were to be created, it would duplicate many of the functions currently performed by existing agencies, thereby increasing the size of the bureaucracy.

D. Decision

Option 1 _____ Reaffirm NASA's role as lead agency for space R&D and promotion and assign another agency (either DOT or DOC) to be lead agency for commercial space regulatory functions.

Option 2 _____ Reaffirm NASA's role as lead agency for space R&D and promotion and divide regulatory functions between DOC and DOT. DOC would be responsible for international and economic regulatory functions and DOT for traditional (launch safety) regulatory functions.

Option 3: _____ Assign both regulatory and non-regulatory functions to only one agency (NASA, DOC, or DOT, or an entirely new agency).

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December 8, 1983

Issue IV-2: How Can We Establish a National Focus for Space Commercialization?

A. Background

Given resolution of the previous issue regarding appropriate agency roles in commercial space ventures, there remains a need for a national focus for those commercial issues that are multi-agency and multi-departmental in nature, and for helping stimulate awareness and high-level interest in commercial space technology development. For this reason, it is proposed that a White House-level space commercialization interagency focal point be established. It would act as the civil counterpart to SIG (Space) and would report to the domestic side of the White House rather than the National Security Council. Such a White House space commercialization interagency focal point would be responsive to the growing perception of a need for balance between civil and military space programs. Whatever form this entity might ultimately take on, it should maintain a continuing dialogue to obtain the views of all interest groups regarding space commercialization, including industry, trade associations, and academic, research, financial, and insurance institutions.

B. Proposals

To achieve a national focus for major multi-agency commercial space activities, one of the following arrangements should be implemented:

Option 1: A Limited-Duration Space Commercialization Task Force within the Executive Office of the President.

This option creates a small, temporary office within the Executive Office of the President (EOP). The group would be staffed (8-12 professionals) by agency detailees and experts from business, academia, and the financial community. OMB and White House junior staff may be assigned to the group as needed. The director of the group would need both industry and Government background. He would solicit advice from senior aerospace, financial, and academic institution executives.

The EOP action group would have a limited time to accomplish its mission (two to three years), but the changes it fosters should be permanent.

Option 2: A Space Commercialization Interagency Group (SCIG).

This option would create a civil commercial counterpart to the current Senior Interagency Group Space (SIG/Space). The group would have no full-time staff, each member relying on his agency staff for support, and therefore would be primarily a deliberative group without line functions.

Members of the Space Commercialization Interagency Group (SCIG) would come from the major civilian agencies with space responsibilities, including NASA, DOC, DOT/FAA, and others on an as-needed basis (for example: Department of State, Department of the Treasury, and FCC). Cross-representation between SIG and SCIG may be beneficial. If so, NASA would continue to sit on SIG, while DOD would sit on the SCIG. The SCIG would be chaired by a senior White House counselor with responsibility for domestic economic policy and industrial relations. He would assign a member of his staff who would be available between SCIG meetings for urgent matters to which firms or agencies needed timely response or advice. He would also be able to get the SCIG to focus on national issues of importance to space commercialization. The SCIG would have a two-to-three-year sunset provision.

Option 3: A Space Commercialization Council.

This option would establish a Space Commercialization Council reporting to the Cabinet Council on Commerce and Trade. The Space Commercialization Council would be chaired by a representative of NASA and include representatives from DOC, DOT, FAA, and one representative from the DOD to assure coordination between military and civil commercial initiatives. NASA would continue to serve on SIG/Space for the same purpose. DOS, Treasury, and FCC would be represented on an as-needed basis. The Council would have a two-to-three-year sunset provision.

C. Analysis

Each of the options has advantages. The staff included with the Option 1 Task Force provides the ability to quickly and independently analyze commercial space issues. In Option 2, the placement of the Space Commercialization Interagency Group (SCIG) provides high visibility and "clout." In Option 3, the Cabinet Council on Commerce and Trade umbrella provides for built-in coordination between NASA and DOC.

All options would be easy to implement. None require legislation. All could be created with some form of sunset provision to assure they do not outlive their usefulness.

On the downside, Option 1 would be the most expensive and also duplicative of existing resources. The SCIG in Option 2 would require one of the highest-level White House counselors to be given this additional responsibility. Option 3 would require additional coordination of major multi-agency commercial space issues through a Cabinet Council often not familiar with these issues.

D. Decision

Option 1 _____ A Limited-Duration Space Commercialization Task Force within the Executive Office of the President

Option 2 _____ A Space Commercialization Interagency Group (SCIG), with a two-to-three-year sunset provision

Option 3 _____ A Space Commercialization Council, with a two-to-three-year sunset provision

December 8, 1983

Overview V: Legal and Regulatory Issues

Laws enacted long before non-Governmental space operations were envisioned are used today to regulate and control launches of privately-owned spacecraft.

For example, laws originally written to control munitions exports are applied to space launches even though no munitions are involved and neither the spacecraft nor its payload are intended for shipment to another country. Such inappropriate laws tend to lead to almost bizarre situations discouraging private space investment.

Similarly, regulations continue to limit certain radio frequencies to exclusive use of Government agencies. These regulations need to be liberalized to make these same frequencies available to commercial space ventures.

Still another legal impediment is the requirement that Government agencies disclose nearly all of the information in their possession. Private space operations require divulging large quantities of information to Government agencies. Entrepreneurs fear that some of their valuable proprietary information may pass to competitors through these Government agencies. To justify major investments in space ventures, entrepreneurs need assurances their proprietary information is protected from public disclosure.

Updating of these laws and regulations is required to bring them into conformity with the needs of commercial activities in space. The following three issue papers -- V-1, V-2, and V-3 -- address these concerns.

DRAFT

December 8, 1983

Issue V-1: How Can Timely Assignments of Radio Frequencies to New Commercial Space Ventures be Assured?

A. Background

Most space projects are dependent on radio transmissions for data communications, tracking of satellites and launch vehicles, range safety, and other purposes. Most commercial space ventures anticipate being able to use Government facilities (on a cost-reimbursable basis) which have been developed over recent years for U.S. space programs. However, most of these facilities use frequencies assigned only to Government users. If this assignment is not modified, commercial projects will be forced to develop their own networks using commercial frequencies. In most cases, the costs would be prohibitive.

B. Proposals

Commercial space projects should be granted access to Government space frequencies.

Option 1:

Eliminate the distinction between Government and commercial use of U.S. space frequencies and order the NTIA and FCC to expedite review and approval of commercial requirements for access to space frequencies.

Option 2:

Maintain present frequency rules.

C. Analysis

United States access to frequencies is controlled through the International Telecommunications Union (ITU). The ITU makes no distinction between Government and commercial users. Assignment of these frequencies is solely a U.S. internal problem. The U. S. National Telecommunications and Information Administration (NTIA) assigns certain U. S. frequencies for Government use and others for commercial use. The NTIA should eliminate that distinction for space and launch vehicles. That would allow the FCC to license commercial users to transmit on Government frequencies.

Centralized frequency coordination would prevent interference with other licensed systems. NASA could serve in the coordinating role.

Option 1 would eliminate a significant regulatory barrier encountered by new commercial space ventures. No significant budget effects are associated with this decision.

D. Decision

Option 1: _____ Eliminate the distinction between Government and commercial use of U.S. space frequencies and order the appropriate agencies (NTIA and FCC) to expedite review and approval of commercial applications for access to frequencies.

Option 2: _____ Maintain the present frequency rules requiring that commercial systems provide their own communications facilities on commercial frequencies.

DRAFT

December 8, 1983

Issue V-2: Should Munitions and Export Control Mechanisms Regulate Commercial Space Activities?

A. Background

Concerns have arisen over the appropriateness of Department of State space payload and launch vehicle regulatory procedures and whether legal authority exists to regulate private launches and private payloads under the Arms Export Control Act.

The Government of the United States, under a number of treaties and international conventions, has the responsibility to authorize and supervise the activities of U.S. endeavors in space. The United States is liable for damage caused in another country by a U.S.-owned launch vehicle or satellite. These agreements prohibit certain weapons in space and also relate to the use of the radio spectrum. These agreements require compliance by Government and commercial activities. As long as all U.S. rocket or satellite launches were conducted by NASA or the Department of Defense, the international agreements posed no significant administrative difficulty. Each launching agency assured compliance with the treaties. A commercial customer for Government launch services had to agree to procedures, as a condition of service, which put his payload in compliance with the international requirements, although customers were not always aware of the reason for some of the procedures.

This process has worked well, but the recent emergence of private launch capabilities may lead to inadvertent circumvention of the Government control procedure. As this private capability started to emerge, the Government agencies recognized that there was no regulatory structure to implement U.S. treaty responsibilities. Apparently, an informal agreement was reached among several involved Government agencies to impose a temporary solution by using the State Department's authority over U.S. activities in the international munitions trade -- the International Traffic in Arms Regulation (ITAR). Under the ITAR, listed categories of goods cannot be exported to another nation from the U.S. by any means without a State Department license. Included on the list are all missiles and satellites. It was, therefore, easy for the agencies involved to develop a control mechanism by getting the State Department to agree it would not issue an ITAR license until all of the other involved agencies were satisfied that their interests were accommodated.

This approach treats a space object as an export. Only through an obfuscated interpretation of the law and regulations can a launch into space be considered an export.

B. Proposals

The Administration should:

Option 1

Affirm that the munitions and export control mechanisms are inappropriate to regulate space activities and issue an Executive Order designating an agency to draft regulations implementing U. S. space treaty obligations regarding payload and launch regulations.

Option 2

Continue the current situation.

C. Analysis

While control through the ITAR meets the objectives of complying with treaty obligations this method is suspect in at least two respects. The first is that using a law and implementing regulations enacted for one purpose to accomplish a different purpose is poor policy. It is the kind of approach that leads to overregulation. Second, it is a mistake to use the apparatus of munitions control to regulate commercial space activities. Payload and launch vehicle regulation is not primarily a munitions control problem and it is an error to create the impression that it is. Further, by labeling a space launch an export, products manufactured in space may be considered imports when landed in the U. S. All this makes the cost of compliance with regulations uncertain. Therefore, it should be affirmed that the ITAR is an inappropriate mechanism for regulating space payloads and launches.

For these reasons, regulations should be drafted and implemented delineating the Government's interests in controlling operations in space and the specific requirements for a launch license. The regulations should identify the agency responsible for the administration of the licensing procedure. The restrictions should be as narrow as possible.

D. Decision

Option 1: _____ Affirm that the munitions and export control mechanisms are inappropriate to regulate space operations. Support legislation that would simplify regulation of private space launch operations and replace the Arms Control Act and ITAR for that purpose.

Option 2: _____ Continue the current status.

DRAFT

December 5, 1983

Issue V-3: How Can Industrial Proprietary Information Be Better Protected?

A. Background

The theme of this initiative is to provide commercial firms protection of industrial proprietary information through appropriate statuatory and/or policy safeguards.

The protection of proprietary information is a serious concern particularly when project lead times are long and the threat of new technologies is substantial. Therefore, it is important that the Government demonstrate a sensitivity to the problem.

Many industries fear that proprietary data provided to the federal Government is vulnerable to compromise - particularly under the provisions of the Freedom of Information Act (FOIA). Since space projects tend to require that substantial information be provided to the Government to meet numerous technical and regulatory requirements, the fear of compromise is a major factor when evaluating space opportunities.

B. Proposals

The Administration should provide assurances that proprietary industry information can be protected.

Option 1

Status quo, except that agencies would be directed to develop additional administrative measures for protection of industry proprietary information.

Option 2

Seek an amendment to the Space Act through the authorization process for a limited exemption from the FOIA for industrial proprietary information relating to space commercialization.

Option 3

Seek an amendment to the FOIA exempting industrial proprietary information relating to space commercialization.

C. Analysis

NASA protects inventions, technical and commercial/financial data to the extent permissible. In the case of inventions, waivers are usually granted by NASA in accordance with the President's policy. NASA also requests the minimum of technical and commercial/financial data that is necessary so as not to unnecessarily jeopardize proprietary data.

However, given the significant investments required for long-lead space development, it is proper to give industry explicit assurances through legislation that the FOIA does not apply to their proprietary data.

Option 3 is probably difficult to achieve due to political sensitivities. It also might embroil commercialization efforts in collateral problems. Option 1 is considered by some to be insufficient to provide the needed protection of proprietary information. Option 2 would provide the necessary safeguards and might be more acceptable politically because it applies only to NASA-controlled data and would modify only the Space Act rather than the FOIA.

D. Decision

Option 1 _____ Develop administrative measures to use the safeguards in existing laws.

Option 2 _____ Seek an amendment to the Space Act to provide for an exemption from the FOIA for proprietary industry data relating to space commercialization.

Option 3 _____ Seek an amendment to the FOIA exempting proprietary industry data relating to space commercialization.

December 2, 1983

Overview VI: National Security Issues

Two national security issues relate to the commercialization of space:

1. Classification of technical information, and

2. International policies concerning foreign competition.

Government-owned technical information which could be of significant value to industry is often unavailable because it is classified or simply because its existence is unknown outside the Government. Issue paper VI-1 discusses this problem.

Subsidized foreign competition affects the ability of U.S. firms to develop and sustain a healthy, vigorous commercial space industry, the existence of which contributes significantly to the U.S. security and economy. Issue paper VI-2 is devoted to this problem.

November 30, 1983

Issue VI-1: How can Industry Gain Easier Access to Classified Technical Information?

A. Background

Capabilities, facilities, and operations developed for the Department of Defense could benefit the private sector if they could be declassified and released for commercial applications.

Commercial interests, particularly those having no access to classified information through Government contracts, are usually unaware that these resources may be available and also are unable to initiate any review and possible declassification.

Also, substantial quantities of data which are not classified are unavailable because of lack of systematic means for their dissemination to non-Governmental users.

B. Proposal

To permit U.S. industry to take full advantage of U.S. Government technology, the following options exist:

Option 1

Assign a senior interagency group to study means for U.S. industry to gain maximum access to U.S. technology while maintaining security and technology transfer safeguards.

Option 2

Establish a Space Technology Clearinghouse for interchange between Government agencies and private organizations having legitimate interests in space technology. The Clearinghouse would evaluate the classification and releasability of data to commercial users. The Clearinghouse would be set up by NASA with DOD and DOC membership and participation.

Option 3

Direct DOD and NASA to be more aggressive in assisting industry in obtaining classified information with commercial possibilities.

Option 4

Expand DOC activities to facilitate better access by U.S. industry to Government technology.

C. Analysis

An example of the possibilities of DOD information and facilities benefiting the private sector is contained in communications satellites in which U.S. industry holds a global technological lead. Initially

developed for DOD use, much of this technology has been declassified and has been made available to the private sector.

Option 1 would provide high-level focus for this issue. However, since this would be only one of many problems which the group would be asked to address, and since it is a complex and continuing problem, the group's ability to establish a long-term solution is doubtful.

Option 2 would establish an organization that could assure a suitable focus for this sensitive issue. If structured appropriately, it could provide an avenue for private sector access to information that could be useful in improving our international competitive position. On the negative side, it would require a new Government entity which could conceivably encounter resistance from existing agencies.

Option 3 would ask existing agencies to be more responsive to this problem. Given the DOD tradition of protecting such information, there may be some resistance to this approach.

Option 4 also would use existing resources through an organization familiar with industry concerns though with less expertise concerning the technological aspects. This option might be best used in combination with Option 3.

D. Decision

Option 1: _____ Assign to interagency group

Option 2: _____ Establish a Space Technology Clearinghouse

Option 3: _____ Direct NASA/DOD to provide more aggressive assistance

Option 4: _____ Expand DOC activities

Option 5: _____ Take no action

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Issue VI-2: How Can Fair International Competition in Space Be Encouraged?

A. Background

The U.S. stands to benefit from prosperous, competitive space commerce. Space industry has been targeted by certain countries as an arena for future commercial competition and has, as such, received substantial subsidies, giving foreign industry (or quasi-commercial entities) substantial competitive advantages. Prominent examples are Ariane launch vehicles; Spot-Images, a commercial earth observation system, and various Japanese ventures in communications systems. U.S. industry has not received similar assistance that subsidizes manufacturing and marketing. Mechanisms to counter subsidized foreign competition need to be explored.

B. Proposals

The U.S. competitive position in the international space market can be enhanced by economic incentives and improvement in the regulatory environment (which are discussed in other issue papers) and by certain options presented here.

Option 1

a. Explore with the Department of State ways in which diplomatic channels can be used to remove foreign restrictions, particularly in telecommunications, that prevent U.S. firms from marketing space products and services abroad.

b. Direct the Department of State to explore ways to gain reduction of excessive foreign government subsidies to commercial space ventures.

Option 2

Given the complexity of this issue, assign a senior interagency group to study it and report its recommendations within an established time frame.

Option 3: Foreign Aid Offsets

Identify a portion of economic aid offered annually to developing countries and stipulate that a portion of this aid be used for purchase of U.S. commercial space products or services (example, satellite communications services).

C. Analysis

Option 1 calls for standard actions with regard to trade problems.

Option 2: Since determining the net benefits to the U.S. from international cooperation in space is a complex undertaking, an interagency study might help. The study should be of short duration and produce specific "doable" recommendations.

Option 3: Foreign aid offsets could be of significant benefit to the U.S. space industry, but could complicate the already controversial foreign aid program.

D. Decision

Option 1: State Department actions calling for:

a. _____ Removal of foreign restrictions on the purchase of U.S. goods and services.

b. _____ Reduction of excessive foreign subsidies to space industries.

Option 2: _____ Senior interagency study.

Option 3: _____ Foreign Aid offsets.

DRAFT

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Given the success of the recent Shuttle flights in assuring greater access to space, the opportunities for undertaking commercial endeavors in space has been gaining significant attention. As a result, interested private sector firms established a Commercial Space Group to delineate the most important issues affecting private sector investment and involvement in space ventures. The Group is composed of the following members:

Citicorp Industrial Credit
Mr. Jerome Simonoff

John Deere & Company
Capt. Wallace H. Lloyd

Fairchild Space Company
Dr. John E. Naugle

Federal Express Corporation
Mr. Gil Mook

General Dynamics
Mr. William H. Rector III

Grumman Aerospace Corporation
Mr. Richard Kline

E. F. Hutton & Company, Inc.
Mr. John Latshaw

Marsh & McLennan
Mr. Gerald E. Frick

McDonnell Douglas Astronautics Company
Mr. Robert Hood

Orbital Systems Corporation
Mr. Bruce Ferguson

Rockwell International
Mr. George Merrick

Space Industries, Inc.
Dr. Maxime Faget

Space Services, Inc.
Mr. Charles M. Chafer

SPARX
Dr. Klaus Heiss

Starstruck, Inc.
Mr. James Bennett

A broad cross-section of private sector firms with disparate backgrounds were sought to help assure that many points of view were represented. Included in this group were aerospace and non-aerospace firms, large and small firms, new and established firms, as well as financial and insurance firms.

The Group categorized the issues into six major areas and appointed a group leader for five of these areas. Particular thanks is extended for the significant efforts of the group leaders; including Robert Hood for the Economic Incentives area, Richard Kline for the Market Expansion area, Max Faget on Government Agency Responsibilities, John Naugle for the Legal and Regulatory area, and William Rector for the National Security and International Policy area. A combined effort was put forth to cover the issues concerning the Consistent Space Policy area.

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